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PERSONAL.

Mr. Charles Greever has been elected City Engineer of Leavenworth, Kan., to succeed Mr. M. D. Parlin.

Mr. E. P. Parsons has been elected City Engineer of Fond du Lac, Wis., to succeed Mr. G. H. Stanchfield.

Mr. L. E. McGann has been elected Commissioner of Public Works, of Chicago, Ill., to succeed Mr. Joseph Downey.

Mr. H. R. Carpenter has been elected City Engineer and Mr. Richard Lonergan, Water Commissioner of Victor, Colo.

Mr. J. A. Hopkins has been appointed Superintendent of water-works at Colorado Springs, Colo., vice Mr. E. W. Frost, resigned.

General William Sooy Smith, civil engineer, has been appointed Engineer in Charge of the foundations of the new federal building at Chicago, Ill.

Mr. John W. Hill, M. Am. Soc. C. E., has been appointed Consulting Engineer, to prepare plans and specifications for the proposed new water supply of Cincinnati, O.

Mr. James F. Davidson has been appointed Superintendent of Public Works, and Mr. Stillman C. Woodruff, Superintendent of water-works, for the city of North Tonawanda, N. Y.

Col. John Magee, Secretary and Assistant to the President, of the Fall Brook Ry., has been elected President, to succeed his father, the late Mr. Geo. J. Magee, with headquarters at Corning, N. Y.

Mr. W. J. Sharp, trainmaster, Chicago Division, Baltimore & Ohio R. R., with headquarters at Garrett, Ind., has been appointed Superintendent of the Staten Island Rapid Transit Co., vice W. O. Sprigg, resigned.

Mr. Arthur W. Dudley has formed a partnership with Mr. Edward J. Doherty, and the two gentlemen have opened offices as civil engineers at 936 Elm St., Manchester, N. H. This firm was incorrectly reported in our issue of April 15 to have opened offices at Exeter, N. H.

Mr. H. W. Lockett has resigned from his position of Principal Assistant Draftsman with the New East River Bridge to accept that of Special Agent with the Continental Ins. Co. of New York, inspecting their risks and the fire protection equipments in the cities of the Middle West.

Mr. Joseph P. Phillips was re-elected City Engineer of Scranton, Pa., on April 12, for the term of three years. We stated in our issue of April 15 that Mr. W. V. Ingraham had been elected City Engineer and Superintendent of Sewers of that city; this was a mistake as he was elected to the latter position only.

Mr. Allen Hazen, consulting engineer, and water-works and sewerage expert, St. Paul Building, New York city, has been appointed consulting engineer of the Pittsburg, Pa., Filtration Commission, recently appointed to investigate the question of filtration in respect to its adaptability to the Pittsburg water supply.

Mr. Albion L. Grandy has been appointed Assistant Engineer of the Chicago & West Michigan Ry., with headquarters at Grand Rapids, Mich., to succeed Mr. J. F. Deimling who has resigned to take charge of the Engineering and Maintenance of Way Departments of the Lake Superior & Ishpeming Ry., with headquarters at Marquette, Mich.

OBITUARY.

Mr. William H. Smith, Superintendent of the Laflin & Rand Powder Mills, near Newburg, N. Y., died April 21.

Mr. John W. McKelvy, Manager of the Armstrong-McKelvy Lead and Oil Co., of Pittsburg, Pa., was killed April 26, 1897, by being struck by an electric trolley car.

Mr. Thomas Carson, a contractor, of Allegheny, Pa., died April 18, aged 60. He was a member of the contracting firm of Carson & Hutchinson, which has recently completed several paving contracts.

Maj. Green Peyton, Proctor of the University of Virginia, Charlottesville, Va., died April 17, aged 69. He was a civil engineer and assisted in the construction of the Virginia & Tennessee R. R. In 1860 he was the editor of the Charlottesville "Review," and in 1861 entered the Confederate Army. After the war he returned to his profession of civil engineering, which he followed until 1868, when he was appointed to the office he held at the time of his death.

ENGINEERING SOCIETIES.

COMING TECHNICAL MEETINGS.

CIVIL ENGINEERS' SOCIETY OF ST. PAUL.
May 3. Secy., C. L. Annan, City Engineer's Office.
ENGINEERS SOCIETY OF WESTERN NEW YORK.
May 3. Secy., Henry Vier, Library Bldg., Buffalo.
COLUMBIAN ENGINEERING SOCIETY.
May 4. Secy., F. W. Hart, 15th and H Sts., N. W., Washington, D. C.
WESTERN SOCIETY OF ENGINEERS.
May 5. Secy., N. L. Littleton, Monadnock Block, Chicago.
AMERICAN SOCIETY OF CIVIL ENGINEERS.
May 5. Secy., C. W. Hunt, 127 E. 23d St., New York city.
NATIONAL MUNICIPAL LEAGUE.
May 5, 6 and 7. At Louisville, Ky. Secy., Clinton F Woodruff, 514 Walnut St., Philadelphia, Pa.
BROOKLYN ENGINEERS' CLUB.
May 6. Paper by Mr. F. A. Barron, on "Lighting New York Harbor by Electric Light." Secy., A. J. Provost, Jr., 191 Montague St.
CANADIAN SOCIETY OF CIVIL ENGINEERS.
May 6. Secy., C. H. McLeod, 112 Mansfield St., Montreal.
TECHNICAL SOCIETY OF THE PACIFIC COAST.
May 7. Secy., O. Von Geldern, 819 Market St., San Francisco, Cal.
MONTANA SOCIETY OF ENGINEERS.
May 8. Secy., Albert S. Hovey, Helena.
INDIANAPOLIS ENGINEERING CLUB.
May 8. Secy., Edson F. Folsom, Indianapolis, Ind.
ENGINEERS' CLUB OF KANSAS CITY.
May 10. Secy., F. W. Tuttle, Baird Bldg.
AMERICAN FOUNDRYMEN'S ASSOCIATION.
May 10 to 14. Annual meeting at Detroit. Secy., John A. Penton, Detroit, Mich.
RAILWAY SIGNALING CLUB.
May 11. Secy., Geo. M. Basford, The Rookery Bldg., Chicago.
DENVER SOCIETY OF CIVIL ENGINEERS.
May 11. Secy., Walter Pearl, 36 Jacobson Bldg.
NORTHWEST RAILWAY CLUB.
May 11. Secy., T. A. Foque, Soo Line, Minneapolis.
CIVIL ENGINEERS' CLUB OF CLEVELAND.
May 11. Secy., F. A. Coburn, Case Library Bldg.
WISCONSIN POLYTECHNIC SOCIETY.
May 11. Secy., W. K. Means, Loan and Trust Bldg., Milwaukee, Wis.
NEW ENGLAND RAILROAD CLUB.
May 12. Secy., Edwd. L. Jones, P. O. Box 1158, Boston.
ENGINEERS' AND ARCHITECTS' CLUB OF LOUISVILLE.
May 13. Secy., James K. Zollinger, Norton Bldg.
ENGINEERING ASSOCIATION OF THE SOUTH.
May 13. Secy., L. P. Brown, Nashville, Tenn.
ST. LOUIS RAILWAY CLUB.
May 14. Secy., H. H. Roberts, 511 Commercial Bldg.
CENTRAL RAILWAY CLUB.
May 14. Secy., H. D. Vought, Buffalo "Currier," Buffalo, N. Y.
ENGINEERS' CLUB OF COLUMBUS.
May 15. Secy., M. S. Hopkins, 14½ N. High St., Columbus, O.
ENGINEERS' CLUB OF PHILADELPHIA.
May 15. Secy., L. F. Rondinella, 1122 Girard St.
ENGINEERS' CLUB OF MINNEAPOLIS.
May 17. Secy., Elbert Nexsen, 1620 S. E. 4th St., Minneapolis, Minn.
ENGINEERS' SOC. OF WESTERN PENNSYLVANIA.
May 17. Secy., R. A. Fessenden, 410 Penn Ave., Pittsburg.
TECHNICAL CLUB OF OMAHA.
May 17. Secy., J. Harry Lawrie, Omaha, Neb.
WESTERN RAILWAY CLUB.
May 18. Secy., W. D. Crossman, The Rookery, Chicago.
ENGINEERS' AND ARCHITECTS' ASSOCIATION OF SOUTHERN CALIFORNIA.
May 19. Secy., F. Van Vleck, Los Angeles, Cal.
ASSOCIATION OF ENGINEERS OF VIRGINIA.
May 19. Secy., J. A. Pilcher, Roanoke, Va.
BOSTON SOCIETY OF CIVIL ENGINEERS.
May 19. Secy., S E. Tinkham, City Hall.
AMERICAN INSTITUTE OF ELECTRICAL ENGINEERS.
May 19. Secy., R. W. Pope, 26 Cortlandt St., New York city.
WESTERN FOUNDRYMEN'S ASSOCIATION.
May 19. Secy., A. Sorge, Marquette Building, Chicago.
ENGINEERS' CLUB OF ST. LOUIS.
May 19. Secy., Richard McCulloch.
SOUTHERN AND SOUTHWESTERN RAILWAY CLUB
May 20. Kimball House, Atlanta, Ga. Secy., F. A. Charpiot, Macon, Ga.
ENGINEERS' CLUB OF CINCINNATI.
May 20. Secy., J. F. Wilson, P. O. Box, 333.
NEW YORK RAILROAD CLUB.
May 20. Secy., W. W. Wheatly, 168 Montague St., Brooklyn.
AMERICAN SOCIETY OF MECHANICAL ENGINEERS.
May 24 to 29, at Hartford, Conn. Secy., F. R Hutton, 12 West 31st St., New York City.
MASTER CAR BUILDER'S ASSOCIATION.
June 8. Annual meeting at Old Point Comfort, Va. Secy., J. W. Cloud, Rookery Bldg., Chicago, Ill.
AMERICAN WATER-WORKS ASSOCIATION.
Annual meeting at Denver, Colo., June 8, 9 and 10. Secy., Peter Milne, 95 William St., New York city.
NORTHWESTERN TRACK AND BRIDGE ASSOC.
June 11. Secy., D. W. Meeker, St. Paul, Minn.

AMERICAN SOCIETY OF RAILROAD SUPERINTENDENTS.—The next annual meeting will be held at Nashville, Tenn., beginning on Wednesday, Sept. 22. Mr. C. A. Hammond, Asbury Park, N. J., is the secretary.

BROOKLYN ENGINEERS' CLUB.—On April 17 an excursion was made, upon invitation, to the Worthington Hydraulic Works, South Brooklyn, and by steam lighter to the Worthington Foundry at Elizabethport. The party numbered 65, including members and guests.

ENGINEERS' CLUB OF PHILADELPHIA.—At the monthly meeting on April 21 Mr. Charles F. Scott, of the Westinghouse Electric Co., who had charge of the installation of the hydraulic and electric machinery at Niagara Falls, delivered a lecture on "The Installation of the Niagara Falls Power Company." The lecture was minutely illustrated by stereopticon views from photographs taken throughout the plant, even extending to the city of Buffalo, where the street cars are run by power transmitted from Niagara. The address was supplemented by a short talk on the same subject by Dr. Coleman Sellers, President of the Cataract Construction Co.

ENGINEERS' CLUB OF ST. LOUIS.—At the regular meeting on April 21 a paper was read by Col. E. D. Meier, entitled "A National Boiler Inspection Law." A review was given of the present status of boiler laws and boiler inspection, and a plea was made for the passage of a national boiler inspection law, the execution of which is to be entrusted to a bureau of the new Department of Commerce and Industries. The discussion which followed was participated in by Messrs. Ockerson, Barth, Baier, Flad and Corey.

Mr. Robert Moore made a few remarks on the death of William Ezra Worthen, honorary member of the club, and presented a resolution expressing appreciation of his high attainments as an engineer and his noble traits as a man, and tendering sympathy to his family.

THE AMERICAN INSTITUTE OF MINING ENGINEERS.—Announcement is made that it is proposed to hold a meeting in the Lake Superior region, in the latter part of July, with excursions to the Vermilion and Mesabi iron ranges, and to some copper mines near Houghton. It has also been suggested that an excursion party visit the Black Hills of Dakota, immediately after the Lake Superior meeting, to occupy about 10 days additional; and another suggestion is that a pleasant party might be formed to go to Lake Superior by steamer from Buffalo, through the Lakes, and holding a couple of sessions on the way. Neither of the above propositions will be carried out, however, unless the responses of members should be so favorable as to assure success. Statements of reduced rates, etc., will follow a favorable vote of the members.

ENGINEERS' SOCIETY OF WESTERN PENNSYLVANIA.—At the regular monthly meeting on April 20 a paper, entitled "Transmission of Power by Compressed Air," was read by Mr. Richard Hirsch. He compared this method of transmission of power with the various other methods in vogue, and gave a detailed estimate of the cost of a plant with a capacity of 1,100 HP., if erected in Pittsburg. Some of the statements in his paper were the subjects of very animated discussion, in which advocates of the gas engine and of electric transmission took a prominent part.

The question of the requisite qualifications and appropriate salary of the director of public works for the city of Pittsburg, as provided in the proposed new charter, was discussed and a committee was appointed to appear before the proper legislative committee and state the views of the Society on the desirability and necessity of providing that this office be filled by an engineer well qualified by education and wide experience.

AMERICAN INSTITUTE OF ELECTRICAL ENGINEERS.—At the meetings held in New York city on April 21, and in Chicago on the same date, a paper by Lieut. George Owen Squier and Mr. Albert C. Crehore was read describing "Experiments upon a New Electrical System of Rapid Intelligence Transmission, and its Possibilities." The experiments were conducted at the electrical laboratory of the United States Artillery School, Fort Monroe, where the land telegraph and telephone wires were used.

One of the most important features of the system is an apparatus for preparing letters in the Morse alphabet with perforated paper so that the messages can be transmitted almost automatically. It is said that under the new system 3,000 words a minute can be sent and received over a single line, and that by duplexing a line the speed is practically doubled. When the system comes into general use, business offices will have their own perforating machines attached to the present typewriter, for the purpose of perforating letters at the same time that they are being written by the typewriter in the usual way.

NEW PUBLICATIONS.

THE CANADIAN MANUFACTURER.—Announcement of special issue.

The new tariffs of the United States and of Canada, together with the British tariff, are to be published in a special issue of the "Canadian Manufacturer," published in Toronto, as soon as the United States and the Canadian tariffs, now under consideration, have been enacted into laws in the two countries. This special edition will be printed on heavy paper. Single copies of the paper are sold for 10 cents.

SOUTH AMERICA, Its Resources and Possibilities. Agricultural, Pastoral and Dairy Resources Described. By John A. Johnson, Member of Delegation sent to South America in 1896 in the interest of international trade, and President of the Fuller & Johnson Mfg. Co., and of the Gisholt Machine Co., of Madison, Wis. Paper, 7⅝ x 5¼ in.; pp. 47; with half-tone illustrations.

The author of the above pamphlet was sent to South America as the representative of the National Association of Agricultural Implement and Vehicle Manufacturers, with the delegation from the National Association of Manufacturers, which spent several months there last summer. Under these circumstances Mr. Johnson pays considerable attention to the agricultural resources and prospects of Argentina and Brazil, and the crops most likely to thrive there. He also discusses railways and the general extent of the South American market, gives the English experience in handling this market, and tells Americans they must be prepared to meet competition. The most valuable part of the pamphlet relates to the goods which will find the most ready market in these regions. The whole pamphlet is interesting reading and copies may be had by applying to the Gisholt Machine Co., Madison, Wis.

TRADE PUBLICATIONS.

(The standard sizes for pamphlets and trade catalogues recommended by all the principal engineering societies of the United States are: 3 1-2 x 6 ins.; 6 x 9 ins., and 9 x 12 ins.)

ALPHA PORTLAND CEMENT.—James A. Davis & Co., New England agents, 92 State St., Boston, Mass. Pamph.; 8 × 5¼ ins.; pp. 14; with half-tone engravings of structures in which this cement was used.

SWITCHES AND FROGS.—Ramapo Iron Works, Hillburn, N. Y. Paper, 10⅝ × 7¼ ins.; pp. 28; illustrated.

This catalogue shows the standard types of frogs, crossings and switches and their various appurtenances manufactured by the above well-known firm. A handsome view of the company's plant forms a frontispiece to the pamphlet.

STREET SPRINKLING WAGONS.—The Miller-Knoblock Co., South Bend, Ind. Three pamphlets; 8 × 10 ins.; 75 pp.; illustrated.

These three pamphlets illustrate and describe the street sprinkling and sewer flushing wagons and the special street railway sprinkling cars made by this well-known firm. The pamphlets are handsomely illustrated by half tone engravings and wood cuts, and drawings showing special features of design and construction.

GRADE LEVEL.—Jackson Grade Level Company, 142 Steward Av., Jackson, Mich. Paper, 6 × 4 in.; pp. 21.

This pamphlet describes the use and adjustment of a simple form of level intended for service in road construction, sewerage, ditching irrigation work, etc. It is a tripod level, so arranged as to be easily adjusted to the grade desired, and is manufactured in three styles, ranging in price from $12 to $27. A number of correspondents certify to the practical value of the instrument.

ARTESIAN AND DRIVEN WELLS.—Barker Artesian Well Co., Providence, R. I. 4 × 9 ins.; pp. 32.

This pamphlet is illustrated with half tones showing various well-driving rigs and a pleasing view of a low-cost windmill at Watch Hill, R. I. There is also a plan of a driven-well plant which furnishes water for condensing and fire purposes at the Oriental Mills, Providence, R. I. The text of the pamphlet relates to artesian and driven wells in general and the work of the above company in particular.

IMPROVEMENTS IN SIGNALING.—The National Switch & Signal Co., Easton, Pa. Paper; 7 × 10 ins.; pp. 39; illustrated.

This pamphlet illustrates and describes quite fully the company's latest or 1896 models of interlocking machines, lazy jack compensators, and switch and lock movements, and gives several handsome illustrations of recent installations of interlocking signals on the Metropolitan West Side Elevated R. R. of Chicago, the Southern Pacific, Great Northern and other Western railways.

LARGE VITRIFIED PIPE.—Blackmer & Post Pipe Co., St. Louis, Mo. Catalogue; 8vo.; pp. 20.

This company commenced in 1890 to manufacture 30-in. standard culvert pipe, and now make pipe 27, 30, 33 and 36 in. diameter. This pamphlet gives the full dimensions of each of these sizes and illustrates and describes the methods of laying them, as contrasted with 3 ft. brick sewer work. Crushing strength tests for these large pipe are included, along with many testimonials of City Engineers. The list price ranges from $2 per lin. ft. for 27-in., to $4 per lin. ft. for 36-in. pipe.

POSITIVE ROTARY BLOWERS AND GAS EXHAUSTERS.—Wilbraham Baker Blower Co., 2518 Frankford Ave., Philadelphia, Pa. Catalogue; 8vo.; pp. 16.

This is a fully illustrated description of the Green positive rotary pressure blower, consisting essentially of a strong ribbed case, enclosing two perfectly balanced impellers, each of the latter being made of a single casting. These impellers are especially designed to take up journal wear and to prevent internal friction or breakage. The gas-exhaust design is also illustrated and full information is given as to dimensions, speed, displacement, etc.

CABLE-MAKING AND WIRE-COVERING MACHINERY. Johnson & Phillips, 14 Union Court, London, E. C. Sheet of 20 illustrations, with brief descriptions.

Messrs. Johnson & Phillips send us this advance sheet, the third of a series issued since the publication of their catalogue in 1895, showing 20 new forms of machines for covering electric wires, taping, making cables, vulcanizing, etc. One of the novelties is a leather belt twisting machine. Twisted leather belting is said to be largely taking the place of ropes for running in grooved pulleys. The machine takes a flat band 1½ ins. wide and twists it into a circular section of ¾-in. diameter.

RED LEAD AND LINSEED OIL PAINT.—The National Lead Co., No. 1 Broadway, New York. Pamphlet; 8vo.; 31 pp.

This pamphlet advocates the use of pure red lead and linseed oil for paint, as preferable to iron oxide pigments. It supports this position by extracts from the discussions of technical societies and by letters from prominent engineers. Incidentally, much useful information is given to those seeking to preserve metallic structures from rust. Notes are added upon mixing and using paint, and formulas for mixtures are quoted as employed by the City of Philadelphia and by shipbuilding and architectural firms.

STEEL PORTLAND CEMENT.—Illinois Steel Co., Chicago, Ill. Paper, 7¼ × 5½ ins.; pp. 32; illustrated.

The Illinois Steel Co. has been for some time engaged in experiments in the production of a hydraulic cement from blast furnace slag which shall be of sufficient uniformity and reliability to enable it to compete with the better known Portland cements in engineering work. This cement the company feels it has now secured and so informs the public in this little pamphlet. The manufacture and use of slag cements have been practised in Europe for many years, and have given rise to a great amount of controversy. That the industry should now be taken up in this country is a fact of much interest, and the success of the new product will be watched with much interest by those interested in cement production or use.

PRESERVATIVE COATINGS FOR IRON AND STEEL.—Edward Smith & Co., 45 Broadway, New York. Third edition, enlarged. Pamph.; 6 × 9 ins.; pp. 69; with many engravings.

This is a reprint of papers upon this interesting subject presented by Prof. A. H. Sabin, M. Am. Soc. C. E., before the American Society of Civil Engineers and before the New England Railway Club. To these are added the discussions upon these papers and others by various well-known civil engineers. The subject especially treated is the preservation of large riveted water mains, such as were laid at Rochester, Cambridge and Allegheny, by dipping them in an asphaltic varnish and then baking them, the process being in fact a sort of japanning on a large scale. The preservation of metal in bridges and buildings is also fully discussed and many works treated by this firm are illustrated. Any engineer interested in any way in the subject of painting or the protection of metal surfaces from corrosion will be well repaid by applying to the above named firm for a copy of this book.

KYANIZED LUMBER.—The Artificial Preservation of Timber. Otis Allen & Son, Lowell, Mass. Pamph.; 8vo.; 27 pp.; illustrated.

The text of this pamphlet argues from the rapidly decreasing natural timber supply that we should make the most of what we have, and that we can double the life of the timber used by employing proper preservative methods. The impregnation of wood by a solution of bichloride of mercury, or corrosive sublimate, was invented in 1832 and is called "Kyanizing," from its inventor, John Howard Kyan. This process has been in use in this country since 1840, and this pamphlet especially illustrates and describes the results obtained through the use of this process at the Kyanizing plant of the Proprietors of the Locks and Canals on the Merrimack River. Space forbids entering into the interesting record of results, but it may be said that the Lowell experience, covering 45 years, has amply demonstrated the great value of the process for the preservation of timber. The illustrations, among others, show a Kyanized fence that has stood 40 years and is still in good condition, and the Pawtucket Street stringer bridge, in Lowell, built in 1849, out of Kyanized Northern pine, and in constant use for 44 years.

CONSTRUCTION NEWS.

CONDENSED LIST OF CONTRACTS PENDING WITH DATE OF OPENING BIDS.

Bids to be opened.	Work.	Place.	See Eng. News.
Apr. 29.	Asphalt paving, Brooklyn, N. Y.		Apr. 22
Apr. 29.	Steel projectiles, Washington, D. C.		Apr. 8
Apr. 29.	Dredging, etc., Oswego, N. Y.		Apr. 1
	Advertised, Eng. News, Apr. 1 to 22.		
Apr. 29.	Rock excavation, etc., Oswego, N. Y.		Apr. 1
	Advertised, Eng. News, Apr. 1 to 22.		
Apr. 29.	Dredging, Portland, Me.		Apr. 15
	Advertised, Eng. News, Apr. 15 and 22.		
Apr. 29.	Bath house work, Fort Douglas, Utah		Apr. 15
Apr. 29.	Brick paving, Easton, Pa.		Apr. 15
	Advertised, Eng. News, Apr. 15 and 22.		
Apr. 29.	School building, Waterloo, Ia.		Apr. 15
Apr. 30.	Water supply, Hoboken, N. J.		Apr. 15
	Advertised, Eng. News, Apr. 15 to 29.		
Apr. 30.	Bridge pier, Washington, D. C.		Apr. 15
	Advertised, Eng. News, Apr. 15 and 22.		
Apr. 30.	Jail, etc., Hillsboro, N. Dak.		Feb. 25
Apr. 30.	Repairing steamer, Boston, Mass.		Apr. 8
Apr. 30.	Pipe sewer, Albert Lea, Minn.		Apr. 8
Apr. 30.	Water-works, Medina, O.		Apr. 15
	Advertised, Eng. News, Apr. 15 and 22.		
Apr. 30.	Fire boat, etc., New York, N. Y.		Apr. 22
Apr. 30.	Relaying cobblestone, Brooklyn, N. Y.		Apr. 22
Apr. 30.	Bridge, Columbus, O.		Apr. 22
Apr. 30.	Steel bridge, Green Bay, Wis.		Apr. 22
Apr. 30.	Water pipe, lead, yarn, etc., Frederick, Md.		Apr. 22
	Advertised, Engineering News, Apr. 22.		
Apr. 30.	Brick paving, Minneapolis, Minn.		Apr. 22
Apr. 29.	Sewers, Fort Wayne, Ind.		Apr. 29
Apr. 30.	Asphalt paving, Kansas, City, Mo.		Apr. 29
Apr. 30.	Sewer, Kansas City, Mo.		Apr. 29
Apr. 30.	Lighting contract (1 yr.), Washington, D.C.		Apr. 29
	Advertised, Engineering News, April 29.		
May 1.	Jail, Long Island City, N. Y.		Apr. 29
May 1.	Heating and ventilating, Washington, D.C.		Apr. 29
	Advertised, Engineering News, April 29.		
May 1.	Street sweeping, removal, etc., Atlanta, Ga.		Apr. 22
May 1.	Electric light plant, Astoria, Ore.		Apr. 22
May 1.	Heating, etc., Lancaster, Pa.		Apr. 22
May 1.	Bonds ($50,000), Pelham Manor, N. Y.		Apr. 22
May 1.	Iron and steel, Cincinnati, O.		Apr. 1
	Advertised, Eng. News, Apr. 1 to 15.		
May 1.	Removing wreck in New York Harbor		Apr. 15
	Advertised, Eng. News, Apr. 15 to 29.		
May 2.	Court house, Eastland, Tex.		Apr. 15
May 2.	Water-works, Astoria, Ill.		Apr. 29
May 3.	Municipal building, Bradford, Pa.		Apr. 29
May 3.	School building, Huntington, W. Va.		Apr. 29
May 3.	Dredging in Mattawan Creek, N.J.		Apr. 29
	Advertised, Engineering News, April 29.		
May 3.	Piles, etc. (500), Boston, Mass.		Apr. 29
May 3.	Pipe sewer, Montclair, N. J.		Apr. 29
May 3.	Brick paving, Albany, N. Y.		Apr. 29
May 3.	Bonds ($75,000), Jacksonville, Fla.		Apr. 1
May 3.	Brick paving, Marietta, O.		Apr. 8
May 3.	Pumping engine, St. Paul, Minn.		Apr. 8
	Advertised, Eng. News, Apr. 8 to 29.		
May 3.	Court house work, Clinton, Ia.		Apr. 15
May 3.	Paving, etc., Albany, N. Y.		Apr. 15
May 3.	Brick paving (18,000 sq. yds.), Bradford, Pa.		Apr. 15
	Advertised, Eng. News, Apr. 15 and 22.		
May 3.	School building, Alexandria, Minn.		Apr. 15
May 3.	Paving, Elmira, N. Y.		Apr. 15
	Advertised, Engineering News, Apr. 15.		
May 3.	Pile bridge, Fargo, N. Dak.		Apr. 22
May 3.	Court house, Texarkana, Ark.		Apr. 22
May 3.	Refrigerating plant, New York, N. Y.		Apr. 22
May 3.	Flagging sidewalks, Brooklyn, N. Y.		Apr. 22
May 3.	Brick and asphalt paving, Oswego, N. Y.		Apr. 22
	Advertised, Engineering News, Apr. 22.		
May 4.	Steel and iron work, New York, N. Y.		Apr. 22
May 4.	Prison, New York, N. Y.		Apr. 22
May 4.	Dredging, New York, N. Y.		Apr. 22
May 4.	Lay water pipe (11,000 ft.), Malden, Mass.		Apr. 22
	Advertised, Eng. News, Apr. 22 and 29.		
May 4.	Paving, New York, N. Y.		Apr. 22
May 4.	Fire hose wagon, etc., Amsterdam, N. Y.		Apr. 29
	Advertised, Engineering News, April 29.		
May 4.	Chemical fire engine, Amsterdam, N. Y.		Apr. 29
	Advertised, Engineering News, April 29.		
May 4.	Iron bridge, Wolfboro, N. H.		Apr. 29
May 4.	School building, Buffalo, N. Y.		Apr. 29
May 4.	Grading, paving, etc., Butler, Pa.		Apr. 29
May 4.	Brick paving, Sharpsburg, Pa.		Apr. 29
May 5.	Plumbing, Baltimore, Md.		Apr. 29
May 5.	Plans, court house and jail, Anderson, S. C.		Apr. 29
May 5.	Asphalt paving, Hartford, Conn.		Apr. 29
May 5.	Granite paving, Brooklyn, N. Y.		Apr. 29
May 5.	Grading, etc., Ventura, Cal.		Apr. 29
May 5.	Bridge, Colusa, Cal.		Apr. 22
May 5.	Court house, Decatur, Ga.		Apr. 22
May 5.	Sewer construction, Warren, Pa.		Mar. 25
	Advertised, Engineering News, March 25.		
May 5.	Steel bridges (4), Natchez, Miss.		Apr. 15
May 6.	Wire, rivets, nuts, etc., Washington, D. C.		Apr. 15
May 6.	Bridge, Wenatchee, Wash.		Apr. 15
May 6.	Dredging (50,000 cu. yds.), Milwaukee, Wis.		Apr. 8
	Advertised, Eng. News, Apr. 8 to 29.		
May 6.	Jail, Eastman, Ga.		Apr. 22
May 6.	Water tunnel, Buffalo, N. Y.		Apr. 22
	Advertised, Eng. News, Apr. 22 and 29.		
May 6.	Boilers, excavating, etc., Yonkers, N. Y.		Apr. 29
May 6.	Water-works, Le Roy, Minn.		Apr. 29
May 6.	Concrete wall, etc., Fort Schuyler, N. Y.		Apr. 29
May 6.	Sewers, New York, N. Y.		Apr. 29
May 6.	Brick and pipe sewers, Cedar Rapids, Ia.		Apr. 29
May 6.	Grading, granite paving, etc., New York		Apr. 29
May 6.	Asphalt paving, Peoria, Ill.		Apr. 29
	Advertised, Engineering News, April 29.		
May 7.	Bridge, Watertown, N. Y.		Apr. 29
	Advertised, Engineering News, April 29.		
May 7.	Electric light franchise, Folsom City, Cal.		Apr. 22
May 7.	Dredging, Detroit, Mich.		Apr. 22
	Advertised, Eng. News, Apr. 22 and 29.		
May 7.	Sewer supplies, Pawtucket, R. I.		Apr. 15
May 7.	Brick and chert paving, Meridian, Miss.		Apr. 15
	Advertised, Eng. News, Apr. 15, 22 and 29.		
May 8.	Canal work ($75,000), Ottawa, Ont.		Apr. 22
May 8.	Sewers, New York, N. Y.		Apr. 29
May 8.	Heating, Winfield, Ia.		Apr. 29
May 8.	Macadamizing, etc., Arverne (L.I.), N. Y.		Apr. 29
	Advertised, Engineering News, April 29.		
May 10.	Court house, Paterson, N. J.		Apr. 29
May 10.	Annex building, Raleigh, N. C.		Apr. 29
May 10.	Stone road, etc., Montclair, N. J.		Apr. 29
May 10.	Brick and pipe sewer, South Bend, Ind.		Apr. 22
May 10.	Brick paving, South Bend, Ind.		Apr. 22
May 10.	Court house, Galveston, Tex.		Apr. 22
	Advertised, Eng. News, Apr. 22 and 29.		
May 10.	Mantels, Fort Hancock, N. J.		Apr. 15
	Advertised, Eng. News, Apr. 15 and 22.		
May 11.	Water-works, Westpoint, Miss.		Apr. 22
May 11.	Water-works, Chagrin Falls O.		Apr. 29
May 11.	Water-works, McGregor, Ia.		Apr. 29
May 11.	Buildings, Riker's Island, N. Y.		Apr. 29
May 11.	Sewers, Brooklyn, N. Y.		Apr. 29
May 12.	Fire hose (11,100 ft.), New York, N. Y.		Apr. 29
May 12.	Underground station, Boston, Mass.		Apr. 22
	Advertised, Eng. News, Apr. 22 to May 6.		
May 13.	Steel bridges (3), Toronto, Ont.		Apr. 22
	Advertised, Engineering News, Apr. 22.		
May 14.	Repairing pier at Portage Lake, Mich.		Apr. 22
	Advertised, Eng. News, Apr. 22 to May 13.		
May 14.	Dam, power house, etc., Manchester, N. H.		Apr. 22
	Advertised, Eng. News, Apr. 22 and 29.		
May 14.	Water bonds ($5,000), Mabel, Minn.		Apr. 29
May 15.	Water-works, Plano, Tex.		Apr. 29
May 15.	Steel bridge, Providence, R. I.		Apr. 29
	Advertised, Eng. News, Apr. 29 to May 13.		
May 15.	Electric lighting (5-yr. cont.), Mobile, Ala.		Apr. 22
	Advertised, Eng. News, Apr. 22 and 29.		
May 15.	County bonds ($20,000), The Dalles, Ore.		Apr. 22
May 15.	Court house, etc., Fort Wayne, Ind.		Apr. 8
	Advertised, Eng. News, Apr. 8 to 29.		
May 15.	Railway ties for 5 years, St. Louis, Mo.		Apr. 15
May 16.	Court house, Whitesburg, Ky.		Apr. 29
May 17.	Sewers, Pelham Manor, N. Y.		Apr. 29
	Advertised, Eng. News, Apr. 29 to May 13.		
May 17.	Bridge, Lehigh Tannery, Pa.		Apr. 29
May 17.	Breakwater at Burlington, Vt.		Apr. 22
	Advertised, Eng. News, Apr. 22 to May 13.		
May 18.	Electric light plant, McMinnville, Tenn.		Apr. 22
May 18.	Water-works, McMinnville, Tenn.		Apr. 22
May 19.	Dredging (600,000 cu. yds.), Chicago, Ill.		Apr. 8
	Advertised, Eng. News, Apr. 8 to 29		
May 19.	Extending pier at Muskegon, Harbor, Mich.		Apr. 22
	Advertised, Eng. News, Apr. 22 to May 13.		
May 19.	Electric elevator, Topeka, Kan.		Apr. 29
	Advertised, Eng. News, Apr. 29 and May 6.		
May 19.	Water-tube boilers, Cleveland, O.		Apr. 29
May 20.	Plumbing, gas, water pipe, etc., West Point		Apr. 29
May 20.	Bridge substructure, Toledo, O.		Apr. 29
May 20.	Plans for court house, Anderson, S. C.		Apr. 22
May 20.	Bonds ($40,000), Union, S. C.		Apr. 22
May 21.	Water pipe, castings, etc., Hatfield, Mass.		Apr. 29
	Advertised, Eng. News, Apr. 29 and May 6.		
May 21.	Water-works, Champlain, N. Y.		Apr. 29
	Advertised, Eng. News, Apr. 29 to May 13.		
May 26.	Dredging and excav., Eastchester Crk, N.Y.		Apr. 29
	Advertised, Eng. News, Apr. 29 to May 20.		
May 29.	Electric light plant, etc., Pensacola, Fla.		Apr. 29
	Advertised, Eng. News, Apr. 29 to May 20.		
June 1.	Drainage canals, etc., New Orleans, La.		Mar. 25
	Advertised, Eng. News, Mar. 25 to Apr. 29.		
June 1.	Pumping stations, etc., New Orleans, La.		Mar. 25
	Advertised, Eng. News, Mar. 25 to Apr. 29.		
June 3.	Canal work (8 miles), Chicago, Ill.		Apr. 15
	Advertised, Eng. News, Apr. 15 to May 6.		
June 10.	Court house and jail, Anderson, S. C.		Apr. 29
June 15.	Iron work, St. Paul, Minn.		Apr. 29
Jun. 23.	Court house, Anderson, S. C.		Apr. 22
July 10.	Plans for capitol building, Harrisburg, Pa.		Apr. 29

RAILWAYS.

BALTIMORE & OHIO SOUTHWESTERN.—A press report states that this company will begin laying 5,000 tons of 75-lb. steel rails next month, about half to be used on the Mississippi division and the remainder between Parkersburg, W. Va., and Chillicothe, O. D. D. Carothers, Engr. Maintenance Way, Cincinnati, O.

CANADIAN PACIFIC.—A press report announces that this company is to construct the Crow's Nest Pass railway into the gold fields of the Kootenai region, receiving a subsidy from the Canadian government of $10,000 a mile, or about $3,250,000 in all.

CHICAGO, FORT WAYNE & EASTERN.—Surveys are being made for this railway from Fort Wayne, Ind., to Kankakee, Ill. Connection will be made with the Findlay,

Fort Wayne & Western at Fort Wayne and extended east to a connection with one of the trunk lines. It is proposed to secure an entrance into Chicago over the Illinois Central.

CHICAGO, ST. LOUIS & TEXAS AIR LINE.—This company has been incorporated in Texas, with a capital stock of $800,000, to build a railway from Coffeyville, Kan., through Indian and Oklahoma territories to Henrietta, Tex., and through Clay, Archer, Young, Stephens, Eastland, Comanche, Brown, Mills, San Saba, Llano, Gillespie, Blanco, Kendall and Comal counties to San Antonio, and through Bexar, Atascosa, McMullen, Live Oak, Duval, Nueces, Hidalgo and Cimeron counties to Brownsville. The incorporators are D. G. Dunn, J. M. Nix, Frank Weinrich, Ed. C. Jones, D. W. Shanks, Edward C. Jones, Wm. G. Collins, T. J. Newton, V. M. Villermain and H. W. Browder. Principal office, San Antonio, Tex.

CHICAGO, ROCK ISLAND & PACIFIC.—An associated press report states that this company is thought to be considering the extension of its lines from Fort Worth to Galveston, Tex., a distance of about 400 miles. W. E. Dauchy, Supt. Maintenance and Construction, Topeka, Kan.

MONTGOMERY, HAYNESVILLE & CAMDEN.—The contract for constructing the first 25 miles of this railway is said to have been awarded to Joseph Gianni & Co., Pittsburg, Pa. The road is to be 75 miles long, and to extend from Montgomery to Camden, Ala. The work of construction is to commence within 90 days after the city of Montgomery has subscribed $20,000. Pres., Sol. D. Bloch; Secy., Maj. James T. Beck; Ch. Engr., James T. Milner, Montgomery, Ala.

RONDOUT & SOUTHWESTERN.—This company has made application to the New York railroad commission for permission to build a line from Kingston to Monticello to connect the New York, Ontario & Western and the Ulster & Delaware railways.

WACO & SABINE PASS.—This company was incorporated in Texas April 17 with a capital stock of $250,000 and proposes to build a railway from Waco in a southeasterly direction through McLennan, Limestone, Robertson, Leon, Madison, Walker, San Jacinto, Polk, Liberty, Harding and Jefferson counties to Sabine Pass, a distance of about 240 miles. Pres., James B. Baker, Waco, Tex.; V.-Pres. and Gen. Man., R. P. Duncan, Louisville, Ky.; Treas., W. W. Seley; Secy., John T. Battle, Waco, Tex.

STREET AND ELECTRIC RAILWAYS.

BANGOR, ME.—The Bangor, Orono & Oldtown Electric Ry. Co., has been granted locations for extensions to its line. Pres., A. F. Gerald, Fairfield, Me.

MANCHESTER, N. H.—The Manchester St. Ry. Co. has applied for permission to extend its lines for about two miles.

PORTSMOUTH, N. H.—It is reported that the contracts for constructing the power houses, grading and laying the rails and furnishing the machinery for the proposed Portsmouth & York Electric Ry. have been let.

GARDNER, MASS.—The Gardner, Westminster & Fitchburg St. Ry. Co. is reported as considering the question of building its electric line on the state road. J. A. Stiles is interested.

WALES, MASS.—Arrangements are being made for the construction of the proposed electric road between Wales and Warren, according to reports. I. L. Currier, of Worcester, Mass., and H. H. Shaw, of Wales, are interested.

LEOMINSTER, MASS.—A. S. Paton, Leominster, writes us that it is not likely that the proposed electric roads to Worcester, Clinton and Hudson, to cost about $250,000, as noted in our issue April 22, will be built before another year.

NEW HAVEN, CONN.—Local papers state that the Railway Syndicate Co. is being organized to build electric roads to Lake Waramaug, New Milford, etc. E. Coleman Boyd, Pres., New Haven Car Register Co., is interested.

BROOKLYN, N. Y.—The Brooklyn Rapid Transit Co. has recently purchased about 30 miles of 94-lb. steel rails, which will be used at once in extending and improving the line. The improvements, which must be completed in eight months, will cost about $800,000.

HAMBURG, N. Y.—The Buffalo, Hamburg & Orchard Park Ry. Co. is reported to have purchased 800 tons of rails and will begin the construction of its proposed electric line at once. U. L. Upson and W. W. Wheatley are interested.

HUDSON, N. Y.—The Hudson Electric Ry. Co. has been incorporated with a capital stock of $50,000, to operate the road of the Hudson Electric Ry. Co., which was sold under foreclosure March 6. Directors: William H. Lamb, R. Rainey, Peoni S. Johnson, Robert W. Evans, William A. Harder, Jr., Smith Thompson, William M. Brownell and Charles S. Rogers, of Hudson, and John E. Gillette, of Catskill.

JEFFERSONVILLE, N. Y.—The Liberty & Jeffersonville Electric Ry. Co. has been incorporated to build a street railway 12 miles long, from Liberty via White Sulphur Springs and Youngsville to Jeffersonville. Capital stock, $120,000; directors: Frank Lober, Wilhelmina Lober, Minnie Lober, Louise Lober, Kate Lober, 598 West 151st St., New York; Charles W. Wilfert, Charles Homer and George Yager, of Jeffersonville.

JAMAICA (L. I.), N. Y.—Work on the power house for the Long Island Electric Ry. Co. will probably soon be begun. It will be 87 x 113 ft. The line between this place and Far Rockaway is now under construction. Survs., Theo. D. Smith & Co., Jamaica.

NEWBURG, N. Y.—The people of this city are petitioning for the extension of the Newburg Electric Ry. on a number of streets.

RIVERHEAD, N. Y.—The Riverhead, Quogue & Southampton R. R. Co. has been incorporated to build an electric road, six miles long, from Riverhead to Quogue, in Suffolk county; capital stock, $60,000; directors: Joseph Martin, J. A. MacElhinny, W. J. Martin, Joseph W. Brooks, 132 Nassau St., New York.

LONG BRANCH, N. J.—The Atlantic Highlands, Redbank & Long Branch Electric Ry. Co. is reported to have been granted a franchise to build a double-track line.

HADDONFIELD, N. J.—The council has granted the Camden & Suburban Electric Ry. Co. a franchise through this place.

HELLERTOWN, PA.—Hugh A. Crilly, Pres. South Bethlehem & Hellertown St. Ry. Co., Allentown, Pa., writes us that ordinances have been passed in the borough for the proposed electric road six miles long. The right of way has been secured from supervisors and consent from abutting property owners. The capital stock has all been subscribed.

McKEESPORT, PA.—The McKeesport & Irwin Electric Ry. Co. has asked for a franchise in Irwin with a branch to Versailles, according to reports.

PITTSBURG, PA.—The Beechwood St. Ry. Co. has been incorporated with a capital stock of $15,000 by Frank McCann, Daniel R. Deely, Charles Donnelly and John F. Steel to build an electric road. Pres., Peter Shields, Pittsburg.——The Corey Ave. St. Ry. Co. has been incorporated with a capital stock of $10,000, of which $1,000 is paid in; G. T. Hamilton, Edgewood, Allegheny county, is interested.

PHILADELPHIA, PA.—The Northwestern Passenger Ry. Co., the Mantua Ave. Passenger Ry. Co. and the Philadelphia & Merion Ry. Co. have asked for electric railway franchises on a number of streets.

HAMPTON, VA.—The extension of the power house and tracks of the Hampton, Newport News & Old Point Comfort Ry. will be begun at once, according to reports. Supt., F. W. Darling.

ELKTON, MD.—It is reported that arrangements are being made for the construction of the North East, Rising Sun & Elk River Electric R. R. Pres., James Mallen, Conshohocken, Pa.; Secy. and Treas., Geo. W. Corden, North East, Pa.

WHEELING, W. VA.—The Suburban Electric Ry. Co. has been incorporated with a capital stock of $500 by N. E. Whitaker, Geo. W. Woods and Chas. M. Fissell, of Wheeling.

PORTSMOUTH, VA.—The Portsmouth & Port Norfolk Electric R. R. Co. has received a franchise from the council, according to reports. Pres., W. H. Minor, Norfolk, Va.; Vice-Pres. and Secy., C. H. Ferguson, Port Norfolk.

RALEIGH, N. C.—The Raleigh Electric Co. proposes to build a new power station, extend its plant and purchase additional cars.

BELLBROOK, O.—J. M. Wilson has been granted a franchise for a street railway in this place.

FOSTORIA, O.—The Toledo, Bowling Green & Fremont Ry. Co. has asked for a franchise to Jersey City.

MASSILLON, O.—The Farmers' Co-operative St. Ry. Co. has been organized to build an electric road to Dalton. C. F. Reinoehl is interested.

CHICAGO, ILL.—Bonds will soon be sold for the proposed electric road, 12 miles long, between Waukegan and Highland Park, for the North Shore Interurban R. R. Co. The Shore Construction Co. is said to have been incorporated to build the line.

HARVARD, ILL.—H. S. Williams, of Harvard, is reported as interested in a projected electric road to Geneva Lake to cost about $120,000.

COLORADO SPRINGS, COLO.—Arrangements are being made for the construction of the proposed electric road by Wallace Hooke.

MONTEREY, CAL.—The Pajaro Extension Ry. Co. has been incorporated to build an electric railway in Monterey county; capital stock, $100,000, of which $10,000 has been paid in; Claus Spreckels, W. C. Waters and John L. Koster are interested.

OAKLAND, CAL.—The construction of the San Pablo Ave. cable line into an electric road at a cost of about $100,000 will soon be begun, according to reports.——The question of constructing an electric railway to Richmond is being considered. W. V. Witcher, Pres., Merchants Exchange, is interested.

SAN MATEO, CAL.—It is stated that the San Mateo Electric Ry. Co. will rebuild and extend its line at a cost of about $300,000. It is said that new rolling stock will be purchased. Pres., A. B. Spreckels, San Francisco; Secy., W. Clayton.

MONTREAL, QUE.—The Montreal & Southern Counties Ry. Co. has been organized to build an electric railway about 150 miles long in the eastern townships at a cost of about $2,000,000, according to reports. Albert J. Corriveau, Montreal, is interested.

NIAGARA FALLS, ONT.—A press report states that a new electric line is projected to extend from Niagara Falls to Drummondville. H. C. Symmes, James A. Lowell and others, of Niagara Falls, Ont., are interested.

PUEBLO, MEX.—Press reports state that H. J. Brennan, of Carbondale, Pa., Maj. E. R. Sprigman, Philadelphia, Pa., and others, are interested in a projected electric road 25 miles long in this city. This work, with 300,000 sq. yds. of asphalt paving, water-works and sewers, will cost about $6,000,000.

ELECTRIC LIGHT AND POWER

BROOKLYN, N. Y.—The contracts for lighting the streets and public buildings for the ensuing year, noted in our issue of April 15, have been awarded to the Edison Electric Illuminating Co., Citizens' Electric Illuminating Co., and the Municipal Electric Light Co.

DOLGEVILLE, N. Y.—Reports state that the Dolgeville Electric Light & Power Co. will erect a power house and build a 24-ft. dam in the East Canada to generate about 1,200 HP. This power will be transmitted to Little Falls and neighboring towns by wire.

ST. MARY'S, PA.—This town is considering the question of constructing an electric light plant, according to reports. J. M. Mecum, Pres. Council.

SPRING CITY, PA.—Local papers state that this town and Royersford will construct a municipal electric light plant to supply both towns with electricity.

WASHINGTON, D. C.—Bids are asked by the district commissioners until April 30 for furnishing and maintaining electric arc lamps in the streets of the District of Columbia for the year ending June 30, 1898, as stated in our advertising columns.

PENSACOLA, FLA.—Bids are asked until May 29 for furnishing and delivering at this place an electric plant and ammunition hoists, as stated in our advertising columns. F. A. Mahan, Maj. Engrs., Montgomery, Ala.

WACO, TEX.—Stephen Turner, Cy. Engr., informs us that this city is considering the construction of an electric light plant, but that nothing definite has been decided upon as yet.

DELTA, COLO.—Press reports state that a special election will be held May 11 to vote on the question of granting an electric light franchise to W. S. Bristol et al, Leadville, for the construction of a plant in this town, N. H. Castle, Clk. Bd. Trustees.

SILVER CITY, N. MEX.—Local papers state that this town is to construct an electric light plant.

KINGMAN, ARIZ.—This town will construct an electric light plant, according to reports.

MONTEREY, CAL.—Our correspondent informs us that the bids received April 17 for constructing an electric light plant were opened in private, and were considered too high. It is probable that the work will be readvertised. F. A. Botsch, Secy. Monterey Power Co.

NEW COMPANIES.—Lytle Creek Water & Power Co., San Bernardino, Cal.; $300,000; A. H. Koebig, Engr., San Bernardino; W. A. Campbell, St. Paul, Minn., is the principal stockholder.

Bowdie Electric Light Co., Pierre, S. Dak.; $5,000; H. D. Baillet, W. W. Brant, A. F. LeClaire, A. L. Yeaton.

J. G. White & Co., New York, N. Y.; $100,000; to manufacture dynamos and other electrical appliances; J. G. White, George H. Walbridge, Hugh H. Harrison.

Marks Enclosed Arc Light Co., of New York, N. Y.; $10,000; Marcus W. Marks, Frederick W. Marks, and Louis B. Marks of New York City.

Port Arthur Telephone & Electric Co., Port Arthur, Tex.; $50,000; R. N. Woodworth, Chicago; D. H. Barnes, H. H. Bell; Geo. E. Blaine, F. W. Hammon, Henry Best, and F. Dunovant, of Port Arthur.

Enterprise Power, Light & Heat Co., Chicago, Ill.; $100,000; Howard B. Cook, Fred L. Boruff, Richard S. Hopkins.

Columbia County Electric Power Co., Valatie, N. Y.; to develop the water privileges of the Kinderhook Creek; Chas. W. H. and Nathan Wild, incorporators.

Bay State Electric Heat & Light Co., Jersey City, N. J.; $300,000; to manufacture, sell, lease, etc., machinery adapted for use in the production of heat by gas and electricity; Patrick J. Kennedy, Boston; Edwin C. Gilman, Winchester, Mass.; Louis P. Hager, Waltham, Mass.

BRIDGES.

WOLFBORO, N. H.—Bids are asked until May 4 for constructing a 90-ft. iron highway bridge 16 ft. wide, over Sawyer's River, in Carroll county; estimated cost, $2,500. Chas. F. Piper, Member Council for 5th district.

WORCESTER, MASS.—A press report states that the board of aldermen is considering the advisability of constructing a bridge over Lake Quinsigamond. Alderman Mellen is said to be interested.

PROVIDENCE, R. I.—The council is said to have approved an ordinance providing a $320,000 loan for constructing a new bridge on the site of the Weybosset bridge and for rebuilding river walls from Market Square to Crawford St., as advertised in our issue of April 1. J. H. Shedd, Cy. Engr.

PROVIDENCE, R. I.—Bids are asked until May 15 for furnishing a steel highway bridge over the Providence River to replace the Weybosset bridge, as stated in our advertising columns. Robert E. Smith, Comr. Pub. Wks.——John T. Tank, of this city, submitted the lowest bid April 20, at $114,573, for constructing abutment walls and piers at the location of the present Weybosset and Crawford St. bridges, as advertised in Engineering News. The itemized bids will probably be published next week.

BROOKLYN, N. Y.—The joint bridge committee opened the following bids April 28 for constructing permanent and temporary bridges over Newtown Creek, between Manhattan Ave., Brooklyn, and Vernon Ave., Long Island City; John J. McLaughlin, Engr.:

Temporary bridge:

Sanford & Stillman, Jersey City, N. J.	$9,950
Conklin & Jones, New York, N. Y.	10,600
Patrick J. Mara, Flushing, N. Y.	12,650
T. & A. Walsh, 130 Pearl St., New York	16,000

Permanent steel bascule bridge, operating machinery and power plant, piers, retaining walls and power house:

King Bridge Co., Cleveland, O.	$273,000
T. & A. Walsh, 130 Pearl St., New York	285,560
Michael J. Dady, Brooklyn	289,700
Stephens & O'Rourke, 44 Broadway, New York	294,900
Chas. Hart, Brooklyn	363,000
Owego Bridge Co., Owego, N. Y.	395,000

BUFFALO, N. Y.—We are informed that the Buffalo Bridge & Iron Works submitted the lowest bid for constructing the Ferry Ave. bridge and the Penn. Bridge Co., Beaver Falls, Pa., the lowest for the Walnut Ave. bridge, over the Erie R. R. tracks.

FORT PLAIN, N. Y.—Press reports state that the superintendent of public works has been authorized to construct a lift bridge over the Erie canal at River St., at an estimated cost of about $8,000.

ILION, N. Y.—Reports state that a bridge over the canal at Railroad St. will be built at an estimated cost of about $18,000. Jas. D. Ringwood, Cy. Engr.

LEWISTON, N. Y.—Reports state that the Lewiston Connecting Bridge Co. has been organized with a capital stock of $200,000 to build a bridge between this town and Queenstown, Ont. Chas. H. Smith, Clifton; John T. Mott, Oswego; Joseph S. Bryant and John M. Bostwick, Buffalo; and Chas. T. Hotchkiss, Lewiston, are directors. The bridge will be for foot and carriage traffic, and for the use of an electric railway.

MONTGOMERY, N. Y.—The council is considering the question of constructing a new bridge in the place of the present suspension bridge. Mayor Wise may be addressed.

WATERTOWN, N. Y.—Bids are asked until May 7 for constructing a bridge over the North branch of Block River at Mill St., as stated in our advertising columns. J. B. Wise, Mayor.

AVONMORE, PA.—Local papers state that a force of men will be put to work this week on the excavation for the abutments of the 600-ft. iron bridge to be built over the Kiskiminetas River at this place.

BRADDOCK, PA.—Press reports state that the plans for the new Braddock and Duquesne bridge, to extend from the foot of 13th St., Braddock, to Mifflin township, have been approved by the secretary of war. The new bridge will be 125 ft. long and will have three piers, the channel span being 50 ft. long. The approaches will cross on one side of the Pittsburg, Virginia & Charleston Ry. and on the other the Pittsburg, McKeesport & Youghiogheny, both at an elevation. The bridge will be built at a grade of over 4%.

DRAVOSBURG, PA.—Reports state that the Second Ave. Traction Co., of McKeesport, has made arrangements to build a viaduct over the Pittsburg, Virginia & Charleston Ry. at this place.

LEHIGH TANNERY, PA.—Bids are asked until May 17 for constructing a bridge at this place. Louis C. Kuntz, Chn. County Commissioners, Wilkes Barre, Pa.

NORFOLK, VA.—Measurements have been taken, according to reports, for a new bridge at McCollough's dock to replace the present bridge used by the New York, Philadelphia & Norfolk, and Norfolk & Carolina Rys., and owned by F. W. McCollough.

NEW ORLEANS, LA.—The Southern Pacific Ry. Co. is reported as making arrangements to build its projected bridge across the Mississippi, near this city, at an estimated cost of about $5,000,000. Vice-Pres., Chas. F. Crocker, San Francisco, Cal., may be addressed.

ANTIOCH, TENN.—The contract for constructing the stone work for the bridge over Mill Creek has been awarded to Geo. Pritchett, Wilkerson, and the iron work to Mr. Hill, Nashville, Tenn.

BLUFF CITY, TENN.—Reports state that it has been decided to rebuild the county bridge, over the Holston River, at this place, at an estimated cost of about $2,000.

BROOKLYN, O.—Plans for the improvement of the Brooklyn bridge have been made and the work will be started at once. About 400 ft. of the south approach will be paved and a protecting wall against the embankment leading to the bridge will be built, at an estimated cost of about $5,000. County Commissioner Kennedy, Cleveland, may be addressed.

CLEVELAND, O.—Local papers state that bridges will be built at Willett St.; estimated cost, $90,000, and at Martin, Willow and Center Sts. M. E. Rawson, Ch. Cy. Engr.

CINCINNATI, O.—Repots state that a viaduct will be built from Eichler's garden to the Zoo at an estimated cost of about $2,000.

SPRINGFIELD, O.—A. T. Balentine, Asst. Cy. Engr., informs us that the following bids were received April 19 for constructing the superstructure of a 120-ft. steel bridge over Buck Creek, as noted in our issue of March 25:

Youngstown Bridge Co., Youngstown, O.	$4,830
Groton Bridge & Mfg. Co., Groton, N. Y.	5,000
Brackett Bridge Co., Cincinnati, O.	4,250
Penn Bridge Co., Beaver Falls, Pa.	4,675
Massillon Bridge Co., Massillon, O.	3,950
Cincinnati Bridge Co., Cincinnati, O.	4,050
King Bridge Co., Cleveland, O.	4,831
Bellefontaine Bridge Co., Bellefontaine, O.	3,995
Wrought Iron Bridge Co., Canton, O.	3,811
Iron Substructure Co., Columbus, O.	3,872
Oregonia Bridge Co., Oregonia, O.	4,100
Lafayette Bridge Co., Lafayette, Ind.	4,400
Toledo Bridge Co., Toledo, O.	4,500
Rogers Iron Co.	4,900
Geo. W. Knopp, Pittsburg, Pa.	4,740
Universal Construction Co., Chicago, Ill.	5,400
Wisconsin Bridge Co., Milwaukee, Wis. (accepted).	3,797

F. M. Townsend, Zanesville, O., was awarded the contract for the substructure at $4,064.

TOLEDO, O.—Bids are asked until May 20 for constructing the substructure for a bridge over Swan Creek, in Swanton township; bond, $600. Chas. N. Jones, County Audr.

DENVER, COLO.—A press report states that the Youngstown Bridge Co., Youngstown, O., was awarded, April 21, the contract for the 11 steel cylinders for the 14th St. viaduct at $3,375, also the contract for the removal and re-erection of the old steel work at $15,602. F. O. Blake & Co. received the contract for the asphalt paving at $20,200 and the brick paving at $10,850.

VANCOUVER, WASH.—The bids received for constructing a bridge over Salmon Creek have been rejected and the county auditor authorized to advertise for new bids and also for bids for constructing a bridge across Burnt Creek on the Fourth Plain Road.

NEVADA CITY, CAL.—Bids are asked until May 8 for constructing a bridge over the Truckee River at Boca. J. M. Buffington, Pres. Bd. Supervisors; J. J. Greany, Clk.

MONTREAL, QUE.—Press reports state that the contract for rebuilding the Victoria bridge, over the St. Lawrence River, near this city, so as to permit double tracking, has been awarded to William Gibson, Welland, Ont.

BUILDINGS

WATERVILLE, ME.—Colby University has been promised a gift of $300,000 provided that the University itself will raise $50,000, according to reports. Most of the fund will very probably go towards the erection of new buildings. Pres., Nathaniel Butler, D. D.

BURLINGTON, VT.—Plans are being prepared for a brick and stone masonic temple to be erected for the grand lodge of the F. and A. M. of this city; estimated cost, $65,000. Archs., Wilson Bros., Drexel Bldg., Philadelphia.

NORTHFIELD, MASS.—Plans will soon be prepared for the new Moody memorial chapel to cost $30,000. Arch., A. W. Fuller, Albany, N. Y.

NEWPORT, R. I.—It is reported that Hermann Oelrichs, 2 Bowling Green, New York, will commence to erect this spring an expensive residence on the former Bancroft property.

ALBANY, N. Y.—Plans are being prepared for a brick and stone theatre to be erected in this city to cost about $60,000. Major J. O. Woodward will be the manager. Archs., Oscar Cobb & Son, 1509 Manhattan Bldg., Chicago.

BROOKLYN, N. Y.—The erection of another large music hall in this city is being discussed according to reports. E. J. Grant, A. A. Low and Wm. C. Redfield are interested.

BUFFALO, N. Y.—Bids are asked until May 4 for erecting school building No. 18 at West Ave. and School St., to cost about $49,000. R. G. Parsons, Secy. Bd. Pub. Wks.; Arch., A. C. Esenwein, 316 Pearl St.——A bill providing for the expenditure of $400,000 for the erection of a combined convention hall and market is now awaiting the Governor's approval. Dr. F. P. Lewis, Chn. Com. Plans have been prepared by Green & Wickes, 110 Franklin St.——The erection of a new hospital for contagious diseases has been recommended by the almshouse committee of this city. If the proposed building is erected the present structure will probably be used for chronic diseases.——It is reported that the theatre, owned by Wm. E. Gibbs, will be extensively altered. Arch., W. G. Warner.——Fort Porter has been made a regimental post and it is expected that the war department will soon advertise for bids for the construction of the necessary additional buildings.——The Kalbfleisch & Raymond Elevator Co. composed of Martin Kalbfleisch, of Brooklyn, and George H. Raymond, of this city, contemplates the erection of a fire-proof grain-elevating tower, with a capacity of 20,000 bus. of grain an hour; also two storage elevators. This plant, which is estimated to cost $275,000, will be erected at the foot of Genesee St. Engr., R. J. Reidpath

BUFFALO, N. Y.—Following close upon the determination of the council to spend $25,000 on the improvement of Niagara Square, comes a project of securing the surrounding property and erecting thereon a number of buildings to be put to hotel, theatre, apartment house and mercantile uses. The only definite information at hand is that F. W. Brown, Guaranty Bldg., has prepared estimates and plans, and that several capitalists, including Col. Richardson, of Chicago, are seriously considering the matter.——Stewart Bros., lumber dealers, are about to erect a new business block at 568-570 Main St. Plans have not yet been prepared.

COLLEGE POINT (L. I.), N. Y.—The question of erecting a new school building in a more central location of the village at a cost of $50,000 will be submitted to a vote of the electors on May 6.

COLLINS, N. Y.—The board of managers of the state homeopathic hospital at this place has decided to expend $150,000 on the erection of additional buildings. Supt. George Allen, M. D., Middletown, N. Y.; Arch., Aug. C. Esenwein, 316 Pearl St., Buffalo, N. Y.

LONG ISLAND CITY, N. Y.—Bids are asked by the board of supervisors of Queens county until May 1, for plans for a new jail and for alterations to present court house. Henry C. Korfmann, Supervisor, 315 Broadway, Long Island City.

LYONS, N. Y.—Having won its fight to retain the county seat of Wayne county, this village will at once begin the enlargement and alteration of the county buildings. Bids will be advertised for immediately.

MEDINA, N. Y.—Bids will soon be asked for erecting a new high school at this place. The site has already been selected and agreed to by Mr. Skinner, State Supt. Public Instruction.

NEW YORK, N. Y.—Bids are asked by the department of correction until May 11 for furnishing the materials and labor required for erecting buildings, apparatus, etc., on Riker's Island; two bonds of $20,000 each are required. Comr., Robt. J. Wright, 148 East 26th St.——Reports state the Chamber of Commerce contemplates the erection of a building of its own, as the present quarters in the Mutual Life Building are too small. The committee on building is composed of John S. Kennedy, Samuel D. Babcock, James M. Constable, Aug. D. Juillard, John C. Brown and Cornelius N. Bliss.——Plans have been filed by the University Club for a 5-story brick and granite club-house to cost about $750,000. Archs., McKim, Mead & White, 160 5th Ave.; by D. P. Cheseboro & Brown, 245 West 54th St., for two 6-story brick store buildings at 61 to 67 North Moore St., to cost $70,000, Archs., Buchman & Deisler, 11 East 59th St.; by Natalie F. Reynal, White Plains, N. Y., for a 12-story brick business building at 11 to 15 Murray St., to cost about $225,000, Arch., Clinton C. Russell, 32 Nassau St.; by Dexter B. Horton, 131 Columbus Ave., for three 4-story brick flat buildings at 132d St. and 11th Ave., to cost about $78,000, Archs., Angell & Higginson, 108 Fulton St.; by Emilio Vignaz, 348 East 114th St., for four 5-story brick dwellings on 114th St., near Lenox Ave., to cost $120,000, Arch., Solomon D. Cohen, 203 Broadway; by Henry Corn, 987 Madison Ave., for a 12-story brick office building at 5th Ave. and 22d St., Arch., Robert Maynicke, 125 Broadway.

SYRACUSE, N. Y.—Competitive plans have been submitted to the board of education for the four new ward schools to be built under the $100,000 bonding act, which now awaits Governor Black's signature prior to becoming a law.

WARSAW, N. Y.—The Sanitarium Co. will, without doubt, erect a new $50,000 sanitarium building, as the citizen's committee appointed to solicit assistance are sure of the $25,000 expected of them.

WHITNEY'S POINT, N. Y.—A fire in this town on April 23 destroyed property valued at $250,000; estimated insurance, $80,000. Among the buildings damaged were the Beach House, Monroe's Opera House, the post office, the fire engine house and the Hopkins Block.

EAST ORANGE, N. J.—It is stated that the town will issue $60,000 in bonds for the erection of a new school building.

JERSEY CITY, N. J.—A bill has recently become a law which provides for the issuse of $300,000 in bonds for the erection of new school buildings here. Messrs. Daly, Stowe and McLean are members of the committee on school sites.

PATERSON, N. J.—Bids are asked until May 10 for the materials and erection of a new court house in this city. Arch., S. B. Reed, 245 Broadway, New York, N. Y.

BRADFORD, PA.—Bids are asked until May 3 for erecting a municipal building to cost $27,500. James A. Lindsey, Cy. Clk., 7 to 9 Rosenberg & Michael Block, Bradford.

PHILADELPHIA, PA.—Bids will soon be asked for erecting the superstructure of the new museum and library building for the University of Pennsylvania, at 34th and Spruce Sts., at a cost of about $400,000. Archs., F. M. Day & Bro., 925 Chestnut St.; Cope & Stewardson, 314 Walnut St.; Wilson Eyre, Jr., 927 Chestnut St.

PITTSBURG, PA.—An addition to the Shadyside Academy, Pres., W. R. Crabbe, is to be constructed soon, at a cost of about $40,000. Contractors, W. W. Miller & Co. Archs., Bartberger & East, Westinghouse Bldg., Pittsburg.

WILKES BARRE, PA.—E. T. Long has been awarded the contract for erecting the new building for the St. Stephen's Episcopal Church, to cost $70,000. The contracts for the interior finishings are still reserved. Arch., Charles M. Burns, 717 Walnut St., Philadelphia, Pa.

BALTIMORE, MD.—Bids are asked by the board of directors of the Maryland Penitentiary until May 5 for plumbing the new penitentiary buildings at Eager and Forrest Sts.; check, $1,000. Warden, John F. Weyler; Arch., Jackson C. Gott, Charles and Fayette Sts.——A committee has been appointed by the Northeast Baltimore Improvement Association to procure the passage by Congress of a bill providing for a new custom house in this city. Dr. M. B. Billingslea, William Fraser and George W. Clark are the members.

BALTIMORE, MD.—Estimates are reported as being secured for a new 12-story office building at Charles and Fayette Sts., on property owned by B. F. Bennett.——Contracts will soon be let for constructing a 5-story warehouse, 31x135 ft., for J. W. Putts. Archs., Frank E. and H. R. Davis. Estimated cost, $50,000.

WASHINGTON, D. C.—Bids are asked by the district commissioners until May 1 for constructing a hot blast steam heating and ventilating apparatus for the western high school building, as stated in our advertising columns.

NEWPORT NEWS, VA.—A fire in this city April 27 destroyed property valued at about $2,000,000. Two piers belonging to the Chesapeake & Ohio R. R. Co., valued at $300,000, were destroyed.

RICHMOND, VA.—The following bids have been received by the building committee of Union Theological Seminary for the erection of the new Spence library building for which $25,000 has been donated; Arch., Chas. H. Read, Jr., 12 North 9th St.: William Gibson, Jr., $24,565; A. C. Houston, $24,283; W. A. Chesterman, $23,598; and N. E. Ancarrow, $23,500.

HUNTINGTON, W. VA.—Bids are asked by the board of education until May 3 for furnishing the materials and labor for erecting a new school building in this place. Arch., J. B. Stewart, Foster Bldg.

RALEIGH, N. C.—Bids are asked until May 10 for erecting an annex to the colored department of the North Carolina Institution for the education of the deaf, dumb and blind. Principal, John E. Ray.

ANDERSON, S. C.—Plans are asked by the county commissioners until May 5 for the new court house and jail, and bids are asked until June 10 for constructing the same, according to reports.

ATLANTA, GA.—Reports state that the erection of a new office building will be started within the next three months. William D. Grant is interested.

SYLVANIA, GA.—Algernon Blair, Macon, Ga., is reported to have been awarded the contract for constructing a county court house in this place at $15,000.

KNOXVILLE, TENN.—Reports state that bids are wanted by W. W. Woodruff for erecting a $25,000 building to replace one recently burned. Archs., Baumann Bros., 612½ Gay St.——A new 4-story hotel is to be erected for Frank McNulty on the site of the one recently destroyed by fire.

LOUISVILLE, KY.—The Fiscal Court will submit to the vote of the people a proposition to spend $300,000 for enlarging and improving the county court house. Charles G. Ritchie, County Judge, Kenyon Bldg.——Plans are being prepared for a 2-story stone church edifice for the Broadway M. E. Church, to cost $5,000. Arch., R. H. Hunt, Keystone Bldg., Chattanooga, Tenn.

WHITESBURG, KY.—Bids are asked by the Fiscal Court of Letcher county until May 16 for erecting a new court house at this place. Comr., S. C. Tyree; arch., Frank P. Milburn, Charlotte, N. C.

CANTON, O.—The board of education received the following bids last week for the construction of a brick and stone school building at Lawrence and Washington Aves.: Robert M. Jack, Canton, $40,546; F. Mentz, Canal Dover, O., $40,410; Jacob Sechrist, Canton, $43,553; M. Heintz, Canton, $39,357; John Minehart, Massillon, O., $41,443; Daniel Holwick, Canton, $38,972.

PORT HURON, MICH.—John G. O'Neill, Pres. Water Bd., informs us that the only improvement for the water department contemplated at present is the erection of a brick and stone coal house, 50 x 65 ft., estimated to cost $4,500.

CHICAGO, ILL.—Plans have been prepared for a 5-story brick and stone factory for the W. W. Kimball Co. to cost about $100,000. Archs., Wm. Strippleman & Son, 159-161 La Salle St.

PEORIA, ILL.—A fire in this city on April 26 destroyed the Iowa elevator, owned by the Iowa Elevator Co., causing a reported loss of about $200,000; insurance, $75,000.

EVANSTON, ILL.—The new Y. M. C. A. building to be erected in this city is to be a 3-story and basement brick and stone structure, with all modern improvements. Archs., Holabird & Roche, 1618 Monadnock block, Chicago.

MILWAUKEE, WIS.—Reports state that the improvements expected to be made this year to the Plankington house, at a cost of $60,000, have been postponed until next season.

CEDAR RAPIDS, IA.—Plans are being prepared for a new 5-story masonic temple in this city, to cost about $100,000, according to reports. Arch., J. W. Ross, Davenport, Ia.

WINFIELD, IA.—Bids are asked until May 8 for heating by steam the school building in this district. T. L. Smith, Secy. Bd. Directors.

DES MOINES, IA.—Plans are being prepared for a brick and stone business building for the Citizens' Improvement Co., at 6th and Locust Sts., to cost about $40,000. Archs., Proudfoot & Bird.

MINNEAPOLIS, MINN.—Plans have been prepared for a brick and stone flat building at Hawthorn Ave. and 13th St., for Anthony Kelly, to cost about $60,000. Arch., Henry W. Jones, 916 Lumber Exchange.

ST. PAUL, MINN.—Bids are asked by the state capitol commission until June 15 for all labor and material required for the general construction of the superstructure, and the structural iron and steel for the new state capitol building; check, $5,000. Vice-Pres., Channing Seabury; Arch., Cass Gilbert, 524 Endicott Bldg., St. Paul.

TOPEKA, KAN.—Bids are asked until May 19 for furnishing the labor and material for erecting an electric passenger elevator for the U. S. court house and post office building in this city, as stated in our advertising columns. Wm. M. Aiken, Supervising Arch., Washington.

ST. LOUIS, MO.—B. H. Brown, superintendent of the construction of new city hall, has estimated that $314,248 will be required to complete the building, which, when finished, will have cost about $2,000,000.——Reports state that the Lionberger estate will reconstruct the Ely-Walker building, at a cost of about $200,000. John D. Davis is the agent.

CRIPPLE CREEK, COLO.—The erection of an opera house, to cost about $35,000, is being contemplated. J. J. Henry and W. C. Newell are interested.

VANCOUVER, B. C.—Bids were asked until April 27 for constructing an 8-room school building. Wm. Blockmore, Rogers Block, Hastings St., may be addressed.

WATER-WORKS.

ADAMS, ME.—J. M. Bright, Bangor, Me., writes us that, as far as known there are no extensions to the works of the Adams Water Co. contemplated.

BANGOR, ME.—The council has passed an order authorizing the committee to proceed with the completion of the works. F. D. Porter, Wm. B. Pierce, Allen H. Drummond and Chas. N. Banks are on the committee.

HATFIELD, MASS.—Bids are asked by the water commissioners until May 21 for furnishing cast iron water pipe and special castings for the proposed extension to the works of the Hatfield water-works, as stated in our advertising columns. Engrs., E. C. and E. E. Davis, Northampton, Mass.

LINCOLN, MASS.—J. L. Chapin, Clk., writes us that the plans for extending the works, for which $25,000 was asked, have not matured.

NATICK, MASS.—James McManus, Town Clk., writes us that at the last annual town meeting $500 was voted to prospect for an additional water supply. There is no immediate likelihood of anything important being done.

WESTERLY, R. I.—The U. S. circuit court has decided that this city can proceed at once with the construction of its proposed works. The contract was awarded to F. E. Shaw, Providence, R. I., April 29, 1896. L. W. Arnold and Dr. E. R. Lewis are on the committee. Consult. Engr., Samuel M. Gray, Providence.

STRATFORD, CONN.—The Bridgeport Hydraulic Co., Bridgeport, Conn., has decided to begin the construction at once of works at this place.

ALBANY, N. Y.—The following contracts were awarded by the water board April 19 for laying water mains: P. H. Reilly, $551; John Doyle, $3,171, $1,254, $1,818; Thos. Lynch, $3,202; M. F. Dolland, $1,671.

CHAMPLAIN, N. Y.—Bids are asked until May 21 for constructing works, as stated in our advertising columns. W. G. Graves, Secy. and Treas. Water Comrs.

FREEPORT (L. I.), N. Y.—D. J. Richardson, Owego, N. Y., has been awarded the contract for constructing two 6-in. wells and extending the mains, at $3,388.

LE ROY, N. Y.—Geo. F. Lowe, Secy. Water Comrs., writes us that the works will have a stand pipe, and the commissioners have yet to buy the meters; population, 2,800. Pres., O. F. Woodward.

LANSINGBURG, N. Y.—Flynn Bros. write us that the town is in need of an increased water supply. It is not known whether a gravity or a pumping system will be required. There has been appropriated $25,000 for a pumping station. The board has not fully decided upon what course to take. C. E. Hicks, Cy Engr.

LYNDONVILLE, N. Y.—The people of this place are considering the question of works for fire protection.

NEWBURG, N. Y.—The question of extending the works for an increased water supply is being considered by the board; estimated cost, about $225,000. Engr., Everett Garrison. Commissioners Sneed, Templeton and Dixon may be addressed.

ROCHESTER, N. Y.—Bids are asked until April 30 for laying 1,000 ft. of cast-iron water pipe, etc., at the county almshouse. Chas. H. Bastable, Clk.; J. W. Clark, Chs.

YONKERS, N. Y.—Bids are asked until May 6 for excavating and refilling trenches and doing other work in connection therewith for water mains in Yonkers Ave., also for furnishing two boilers, etc. W. H. Doty, Pres.; J. A. Lockwood, Clk.

HADDONFIELD, N. J.—The Union Water Co., composed by the Central Water Co., and the Haddonfield Water Co., has been granted permission to lay water pipes in this place.

NAVESINK, N. J.—N. J. Conover, Freehold, N. J., is said to have been awarded the contract for constructing small works, at the Highlands. Engr., F. A. Dunham, Plainfield, N. J., and St. Paul Bldg., New York.

WOODBRIDGE, N. J.—The Middlesex Water Co. has been granted permission to lay pipes in this town. Capital stock $150,000. Pres., H. L. Dudley. W. C. Langley, of Elizabeth, N. J., is interested.

BELLEVUE, PA.—The National Foundry & Pipe Works, Limited, Scottdale, Pa., and Lewis Block, Pittsburg, is reported to have been awarded the contract for furnishing about nine miles of 6 and 16-in. water pipe for the plant of the Bellevue Water Co. The works, complete, it is said, will cost about $200,000. Treas., T. Lee Clark.

CALIFORNIA, PA.—The California Water Co. has been incorporated to supply this place with water; capital stock, $1,000; Treas., Edwin S. Calhoun, New Brighton, Pa.

COAL CENTER, PA.—The Coal Center Water Co. has been incorporated with a capital stock of $1,000 by Edwin S. Calhoun, New Brighton, and others. The same parties have incorporated the Stockdale (Washington county) Water Co.

DUNLO, PA.—The Dunlo Water Co. has been incorporated; capital stock, $5,000, with $500 paid in; directors, W. A. Crist, Osceola Mills; Thomas Fisher, W. A. Berwind, Philadelphia; J. I. Cunningham; Tyrone, Pa. Treas., E. L. Myers, Philadelphia.

MEADVILLE, PA.—Subscriptions are being taken for stock to a new water company, which will be formed as the result of the injunction recently granted. As soon as $75,000 is guaranteed work on the new plant will be begun, according to reports. The capital stock will be $125,000. A. B. Richmond, H. J. Humes and Thos. Roddy are interested.

PHILADELPHIA, PA.—The residents of West Philadelphia have petitioned the councils to appropriate $1,000,000 to construct a reservoir to better supply that part of the city with water.

REEDSVILLE, PA. — Surveys have been made and a company organized to supply Reedsville, Manns, Yeagertown and Burnham, Mifflin county, with water from Cooper's Gap. The supply will be by gravity. Engr., Edgar B. Kay, Bellwood.

SCALP LEVEL, PA.—The Scalp Level Water Co. has been organized to furnish a supply by gravity; capital stock, $12,000; Pres. and Engr., Edgar B. Kay, Bellwood, Pa.; Vice-Pres., Samuel Hoffman, Scalp Level; Secy., Edwd. H. Werner, Somerset, Pa.

SOUTH BETHLEHEM, PA.—It is stated that bids will probably soon be asked for furnishing this place a water supply for fire protection for a term of 10 years. R. E. Neumeyer, Borough Engr.; Adam Brinker, Chn. Com.

WESTCHESTER, PA.—W. W. Lindsey is said to have about completed plans and specifications for the pumping station at Milltown for the proposed increased water supply.

RICHMOND, VA.—Bids are asked until April 29 for furnishing 1,000 water meters, 1,000 boxes, 1,000 lbs. of wiping solder, etc. Chas. E. Bolling, Supt.

ATLANTA, GA.—The Rensselaer Mfg. Co., Troy, N. Y., has been awarded the contract for furnishing water gates and the Corey hydrant; the Dwyer Mfg. Co., St. Paul, Minn., for furnishing the Paragon stop boxes; the H. Mueller Mfg. Co., Decatur, Ill., for the corporation curb-cocks and other brass fittings, and the Glamorgan Pipe & Foundry Co., Lynchburg, Va., for furnishing valve boxes, sleeves, plugs, etc., as advertised in Engineering News. Secy., C. M. Brown; Supt., Park Woodward.

TOCCOA, GA.—The council has granted the Southern Industrial Colonization Co. franchises for supplying this place with water and light. Plants will be built at once, according to local papers.

LAKE BUTLER, FLA.—The question of issuing bonds for water-works and for lighting is being considered.

MONTICELLO, FLA.—Another election will probably soon be held to vote on the question of constructing works.

ST. AUGUSTINE, FLA.—The St. Augustine Water-Works Co.'s plant, owned by the C. E. Parker and E. C. Joyce Co., was sold April 19 by decree of the United States court to P. McGauly, of Alabama.

DOTHAN, ALA.—The contract for constructing works has been let, according to reports.

BROOKHAVEN, MISS.—J. B. Dungttry, Mayor, writes us that plans and specifications for works will be filed by April 28. An election has been ordered for May 11 to vote on the question of works and an electric light plant. Engrs., Sanders & Porter, Louisville, Ky.

GREENWOOD, MISS.—The construction of works is reported as being considered.

OPELOUSAS, LA.—C. J. Thompson, Mayor, writes us that B. F. Rounds, of Houston, Tex., has been awarded the contract for constructing works and an electric light plant to be completed five months from April 10 at a cost of $29,700. A steel tower of 75,000 gallons capacity will be required.

MILAN, TENN.—An election is reported to have been called for April 27 to vote on the question of issuing $16,000 in bonds for constructing works and an electric light plant.

CHAGRIN FALLS, O.—Bids are asked by the water commissioners until May 11 for constructing works. Consult. Engr., L. E. Chapin, Canton, O.

WEST ALEXANDRIA, O.—This place is reported to have voted to build works.

YOUNGSTOWN, O.—Bids will be asked at once by the secretary of the water-works trustees for furnishing 12 and 20-in. water pipe, according to reports.

DETROIT, MICH.—The water board proposes to construct a brick conduit in place of the sheet iron conduits between the intake pipe and the settling basin at a cost of about $100,000. Secretary Case and Chief Engineer Williamson may be addressed.

FOWLERVILLE, MICH.—The construction of works is proposed, according to reports.

ASTORIA, ILL.—Bids are asked until May 2 for constructing works. Consult. Engr., Orrin Ford, 710 Security Bldg., St. Louis, Mo.; J. D. Atkinson, Chn. Water-Works Com.

BELLEVILLE, ILL.—Fred Sunkel, Mayor, writes us that Henry Leschen and associates, 920 North Main St., St. Louis, Mo., have been granted the franchise for constructing the deep well water plant. It is understood that John P. Martin, Xenia, O., has part of the contract. Population, 20,000.

MELLEN, WIS.—The Mellen Water & Lighting Co. has been incorporated with a capital stock of $5,000 by J. F. Reibenor, G. A. Hennell and H. E. Willoughby.

LE ROY, MINN.—Bids are asked until May 6 for constructing works. M. T. Dunn, Pres. Council.

DES MOINES, IA.—The water committee is reported by local papers as arranging for the construction of the new works. The city engineer was directed April 14 to secure a consulting engineer.

McGREGOR, IA.—Bids are asked until May 11 for constructing works, which will include a distribution pipe system, a brick pump house, a gasoline engine pumping plant, a masonry reservoir and an artesian well. Engr., C. F. Loweth, 94 E. 4th St., St. Paul, Minn.; A. Chapin, Chn. Com.

OZARK, MO.—The people of this place are reported to have recently voted to grant a franchise for works.

FRANKLIN, TEX.—J. S. Thacher, 304 Cockrell Bldg., Dallas, Tex., has just closed a contract with this city to remodel the works. The changes and additions will include a 10 × 75-ft. stand-pipe, a 40 HP. boiler and a Worthington air compressor and air lift to replace the present deep well pump. Work will begin at once.

HICO, TEX.—J. S. Thatcher, Des. Engr., Dallas, Tex., writes us that the following bids were received April 19 for constructing works, as advertised in Engineering News:

Jerry Pittman, Hico, Tex	$6,100
M. P. Kelley, Georgetown, Tex	7,100
*O. J. Gorman, Dallas, Tex	5,264
Geo. E. King Bridge Co., Des Moines, Ia	5,775
C. W. Olcott, Dallas, Tex	6,340
Grigsby Cons. Co., Dallas, Tex	7,027
J. M. Carter, Bowie, Tex	6,938
Risien & Harrison, Dublin, Tex	5,775
J. F. Weed, Houston, Tex	6,250
B. F. Rounds, Houston, Tex	6,190

*Awarded contract for complete plant, except hose and cart.

MARTIN, TEX.—J. E. Kennedy, Mayor, writes us that a vote will be taken May 4 on the question of issuing $25,000 in bonds for works and an electric light plant. Pownall & Minshall, 150 Nassau St., New York, N. Y., have been engaged to prepare plans for the works, but not for the electric light plant.

PALESTINE, TEX.—W. C. Campbell, City Secy., writes us that the city did not have an election to vote directly on the question of the city ownership of the water-works, but those men were elected to office who favor such a scheme.

PLANO, TEX.—Bids are asked by the Mayor until May 15 for constructing works. The plant will consist of a dam and reservoir at Spring Creek; a pump house near the dam; a pumping plant, consisting of a vertical submerged flue boiler of 35 HP.; a horizontal duplex high pressure steam pump of 750,000 gallons capacity; a distributing system of 4,400 ft. of 6-in. pipe, 950 ft. of 8-in. pipe and 360 ft. of 4-in. pipe, a steel standpipe 80x12 ft., etc.

DELTA, COLO.—The question of spending $10,000 for improving the water-works has been voted upon favorably.

FLORENCE, COLO.—Geo. Killiun, Clk. and Recdr., writes us that nothing has been done as yet in regard to works. It was expected that something would be done at the council meeting April 26.

NEW WHATCOM, WASH.—C. M. Adams, Engr., informs us that bidders for constructing the proposed works were required to submit their own plans. The bids submitted ranged from $3,000 to $5,240, according to class of material, etc.

SEATTLE, WASH.—R. H. Thomson, Cy. Engr., writes us that surveys and preliminaries for a gravity system, to cost about $1,250,000, as outlined in our issue of Jan. 9, 1896, are proceeding to completion. It is hoped to advertise for bids in June.

REDLANDS, CAL.—The Lugonia Water Co. has voted to issue $30,000 in bonds for a piping system. A. G. Hubbard, G. A. Cook, C. H. Lathrop and I. E. N. Eaton have been appointed a committee to select the pipe.

PRESCOTT, ARIZ.—J. J. Fisher has estimated that a storage reservoir of 400,000,000 gallons capacity would be required for this city.

PUEBLO, MEX.—Press reports state that $6,000,000 will be spent here in constructing works, sewers, 300,000 sq. yds. of asphalt paving and about 25 miles of electric railway. H. J. Brennan, Carbondale, Pa.; Maj. E. R. Springman, Philadelphia, Pa., and J. A. Carrigan, of New York, are said to be interested.

SEWERAGE.

CALAIS, ME.—Reports state that surveys are being made for the proposed sewer system.

BOSTON, MASS.—The John Booth Co., Winchester, Mass., submitted April 24 the lowest bid, at $14,899, for constructing section 50 of the metropolitan sewer system, in Melrose and Wakefield, as noted in our issue of April 15. The itemized bids will probably be published next week.

LOWELL, MASS.—Sewers will be constructed in Westford, Hastings, Oakland, Waugh, Sargent, and Wannalancit Sts., according to reports. Geo. Bowers, Cy. Engr.

BINGHAMTON, N. Y.—A 1,250 ft. brick sewer will be constructed in Lydia St. and pipe sewers in Oak, Allen, Jarvis, Leroy and Birch Sts. S. E. Monroe, Cy. Engr.

BROOKLYN, N. Y.—Bids are asked until May 11 for constructing sewers in 6 streets, bond $11,200. Theodore B. Willis, Comr. Cy. Wks.

DANSVILLE, N. Y.—Reports state that this town is considering the question of constructing a sewer system. John Yochum, St. Comr.

FULTON, N. Y.—Reports state that the contract for constructing the remaining two miles of the sewer system has been awarded to Baker & Banker of Syracuse and Gloversville at $10,811.

NEW YORK, N. Y.—Bids are asked until May 6 for constructing sewers in 5 streets. Louis F. Haffen, Comr. St. Improvements, 23d and 24th Wards.

NEW YORK, N. Y.—Bids are asked until May 8 for constructing sewers in Fordham Road and East 156th St., Caldwell and Eagle Aves. Louis F. Haffen, Comr. St. Improvements, 23d and 24th Wards.

PELHAM MANOR, N. Y.—Bids are asked until May 17 for constructing sewers, as described in our advertising columns. John C. Hazen, Clk. Comrs.; F. Carles Merry, Pres.

SIDNEY, N. Y.—Reports state that a 1,650 ft. extension will be made to the sewer system.

MONTCLAIR, N. J.—Bids are asked until May 3 for constructing about 500 ft. of 8-in. pipe sewer in Montague Place. H. Trippett, Town Clk.

NEWARK, N. J.—The board of health has petitioned the Mayor for sewers in several streets. J. C. Mundy, Supt. Sts.

WILDWOOD, N. J.—The following bids were received April 16 for constructing a sewer system as noted in our issue of April 8:

Thos. C. Cooper, Roxborough, Pa	$4,450
McGovern & Hannigan, Trenton, N. J	3,179
Read & Aris, Vineland	3,473
Hang & Reilley, Chester, Pa	5,398
Shoemaker & Mulloy, Lansdown, Pa	4,240
Keim & Allen, Trenton, N. J	3,584
B. F. Sweeten & Son, Camden, N. J	3,763
Geo. W. Ruch & Co., 2851 Hutchinson St., Phila	6,400
Chas. S. Heins, 1934 Callowhill St., Philadelphia	5,944
E. S. Wells, South Penn Square, Philadelphia	4,381
Hoben & Doyle, Philadelphia	4,600

RED BANK, N. J.—The following bids were received April 20 for constructing a sewer system, as advertised in Engineering News, Hedenberg & Kinsey, Engrs., 108 Fulton St., New York city:

Robt. B. Mitchell, Brooklyn, N. Y	$15,000
Fell & Co., Orange, N. J	16,138
E. H. Post, Wilkesbarre, Pa	16,439
John H. Sidall, Trenton, N. J	17,246
W. F. McGovern, Trenton, N. J	18,695
National Contracting Co., New York city	19,488
Quinlan & Leary, South Amboy, N. J	21,409
Aetna Construction Co., New York city	22,390
Leahy & Brennan, New York city	24,310
Wm. Bryan, Sea Bright, N. J	25,274
Smith & Conover, Spring Lake, N. J	26,961

MANSFIELD, PA.—Reports state that this town will construct a sewer system.

McKEES ROCKS, PA.—This town is considering the extension of its sewer system at an estimated cost of about $18,400, according to reports. R. F. Hunter, Borough Engr.

MILFORD, DEL.—This town is contemplating construction of a sewer system, according to reports.

ATLANTA, GA.—The council has passed ordinances providing for the construction of sewers in 10 streets. R. M. Clayton, Cy. Engr.

HUNTSVILLE, ALA.—A sewer system will be constructed, according to reports.

LOUISVILLE, KY.—Press reports state that a sewer system is to be constructed in Enterprise. John H. Pearson, Cy. Engr.

CINCINNATI, O.—Reports state that Henry Frank has been awarded, at $3,804, the contract for constructing the sewer in the ravine from Clifton Ave. to Bates run and Henry Wellman the construction of the Bloody run sewer at $36,919.

GRANVILLE, O.—A sewer to connect with the Dennison university is contemplated, according to reports.

FORT WAYNE, IND.—Bids are asked until April 29 for constructing sewers in several streets. F. M. Randall, Cy. Engr.

CEDAR RAPIDS, IA.—Bids are asked until May 6 for constructing about 13,282 ft. of 6 to 15-in. pipe sewers, 23 manholes, 33 lampholes, 11 flush tanks and 50,000 brick in specials. Payment in assessment certificates. E. P. Boynton, Cy. Engr.

JOPLIN, MO.—Reports state that this town will spend $5,000 in sewer construction this season. S. J. McKee, Cy. Engr.

KANSAS CITY, MO.—Bids are asked until April 30 for constructing a joint district sewer in districts No. 54 and 55. Henry A. Wise, Cy. Engr.

ST. JOSEPH, MO.—An ordinance has been introduced into the council appropriating $15,000 for the extension of the Blacksnake sewer. C. W. Campbell, Cy. Engr.

PUEBLO, MEX.—A Scranton, Pa., dispatch states that H. J. Brennan, of Carbondale, and Major E. R. Sprigman, Philadelphia, have gone to this city, where they expect to secure contracts for constructing about 25 miles of electric railway, laying 300,000 sq. yds. of asphalt pavement, constructing a sewer system and putting in a water-works plant at a total estimated cost of about $6,000,000.

GARBAGE DISPOSAL—STREET CLEANING.

NEW YORK, N. Y.—The following bids were opened in the Street Cleaning department April 26th, for the construction of substructure and superstructure of a steel pocket dump at the foot of 131st St. and the East River:

Riter & Conley, 39 Cortlandt St	$10,945
Owego Bridge Co., Owego, N. Y	10,969
King Bridge Co., 501 5th Ave	11,800
R. H. Hood, 26 Cortlandt St	11,888
Steers & Bensel, 5 Bowling Green	12,118
Augustus Smith, 39 Cortlandt St	12,285
Wm. Sleicher, Jr	17,364

SYRACUSE, N. Y.—A committee has been appointed by the board of health to visit Bridgeport, Conn., and Philadelphia, Pa., to inspect certain systems of garbage disposal. Commissioners Bartholemew and Hunter may be addressed.

WILMINGTON, DEL.—The Dixon Sanitary Crematory Co., Findlay, O., has been awarded the contract for a plant in this city to cost about $16,000.

STREETS AND ROADS.

BOSTON, MASS.—The board of aldermen has passed resolutions providing for the macadamizing of several streets in South Boston, and for asphalting part of Harrison Ave.——Benj. W. Wells, Supt. Sts., reports that the proposed macadamizing of Burke St. will cost about $2,900.

BOSTON, MASS. — McCusker Bros. were awarded, at $16,368, on scheme A the contract for surfacing about 2½ miles of Mystic Valley driveway, as noted in our issue of April 15. The itemized bids will probably be published next week. Wm. T. Pierce, Engr. Park Comn.

CAMBRIDGE, MASS.—The board of aldermen is said to have adopted a resolution appropriating $100,000 for completing the esplanade and sea wall from the Charles River to Main St. L. M. Hastings, Cy. Engr.

MALDEN, MASS.—Local papers state that the board of aldermen has passed a resolution appropriating $10,000 for brick sidewalks, and $20,000 for new streets and extensions. G. A. Wetherbee, Cy. Engr.

SPRINGFIELD, MASS.—Reports state that a new driveway will be constructed along the river bank and that Tilly Haynes, of New York city, has had plans prepared for the proposed improvement. Chas. M. Slocum, Cy. Engr.

HARTFORD, CONN.—Bids are asked until May 5 for about 17,000 sq. yds. of asphalt paving on Main St. Chas. H. Northam, Pres. Council.

PUTNAM, CONN.—Reports state that this town is considering the purchase of a road machine. Herbert Cord, Cy. Engr.

ALBANY, N. Y.—Bids are asked until May 3 for brick paving in Spring, Knox, Lodge and Chapel Sts.; bond, $20,000. Thos. J. Lanahan, Clk. Bd. Contract.

ARVERNE (L. I.), N. Y.—Bids are asked until May 8 for regulating, macadamizing and otherwise improving

certain streets and avenues in this village, as stated in our advertising columns. E. W. Conklin & Sons, Engrs., Far Rockaway; John R. Waters, Pres. Bd. Trustees; A. E. Karelesen, Clk.

BROOKLYN, N. Y.—Bids are asked until May 5 for grading and paving with granite, Miller Ave., from Jamaica Ave. to Eastern Parkway; bond, $10,000; and for repaving with granite parts of six streets; bond, $11,250; also for laying 5-ft. asphalt strips on each side of Bushwick Ave., from Vanderveer St. to Myrtle Ave.; bond, $8,000. Theodore B. Willis, Comr. Cy. Wks.——The following bids were received April 14 for macadamizing 96th St., from Third Ave. to the Shore road: John McGlyn, $7,305; Norton & Gorman, $7,130; Frank J. Gallagher, $6,847; Harris & Maguire, $6,450; Thomas Gilbride, $4,800; Desmond Bros., $4,666; John Curran, $4,400; Cody Bros., $4,380.

BUFFALO, N. Y.—The following bids were received April 21 for paving in Swan, Broadway, Hayden and Niagara Sts., as noted in our issue of April 15: Swan St.—German Rock Asphalt & Cement Co., $5,693; Barber Asphalt Paving Co., $6,171. Broadway—Barber Asphalt Paving Co., $1,587; German Rock Asphalt & Cement Co., $1,568. Hayden St.—German Rock Asphalt & Cement Co., $11,593; Barber Asphalt Paving Co., $11,729; P. B. McNaughten, brick, $8,900. Niagara St., from Forest to Hertel Aves.—P. B. McNaughton, stone, $80,559; brick, $51,600; Barber Asphalt Paving Co., $60,189; German Rock Asphalt & Cement Co., $52,889.——Our correspondent informs us that the council has voted $25,000 for a speedway at the park, the park board of which William Hengerer is chairman, having charge of the preparing of plans, etc.

NEW YORK, N. Y.—Bids are asked until May 6 for grading, granite paving and laying crosswalks in 169th St. and Ogden and Tremont Aves. Louis F. Haffen, Comr. St. Improvements, 177th St. and 3d Ave.

PATCHOGUE (L. I.), N. Y.—Reports state that Ocean Ave., from Baker Ave. to Main St., is to be paved with brick. G. A. Roullier, Engr., Flushing, N. Y.

PORT RICHMOND (S. I.), N. Y.—The town of Northfield will issue $40,000 in bonds for road improvements, according to reports.

ROSLYN (L. I.), N. Y.—Samuel L. Hewlett was awarded, at $20,432, the contract for macadamizing the Sands Point and Manhasset road from Manhasset to Port Washington, a distance of about 18,745 ft.

WURTSBORO, N. Y.—This village is considering the purchase of a stone crusher, according to reports.

MONTCLAIR, N. J.—Bids are asked until May 10 for the following work: Constructing an 8-in. stone road, 16 ft. wide; for supplying and spreading cracked stone by the cubic yard; paving gutters with cobble-stone not less than 4 ins. diameter; constructing bluestone sidewalks, etc. H. Trippett, Town Clk.

BUTLER, PA.—Bids are asked until May 4 for grading, curbing and paving with brick, asphalt blocks, Ligonier blocks or sheet asphalt on West Cunningham and East Wayne Sts. and Centre Ave.; bond $1,000. H. E. Coulter, Secy. Council.

CURWENSVILLE, PA.—Reports state that bonds to the amount of $15,000 will soon be issued for street paving.

DUBOIS, PA.—This city will pave about 3,300 ft. of streets this summer with brick. There will also be about 6,800 ft. of curb to set on same streets. Bids will be asked as soon as specifications are completed. W. A. Moore, Cy. Engr.

SCRANTON, PA.—Jos. P. Phillips, Cy. Engr., has been instructed to prepare plans and estimates for paving Providence Road and North Main St. with brick or asphalt.

SHARPSBURG, PA.—Bids are asked until May 4 for brick paving in Clay and North Canal Sts. E. C. Hurlbert, Borough Engr.; Geo. D. McMorran, Pres. Council; Chas. A. Clowes, Clk.

YORK, PA.—Local papers state that Joseph U. Fritchey, Lancaster, Pa., has again been awarded the $200,000 paving contract.

CHARLESTON, W. VA.—Reports state that the county roads will be improved and that a committee has been appointed to prepare plans for the proposed improvement.

HAMILTON, O.—Local papers state that Main St., from the bridge to Millville Ave., is to be paved with asphalt. L. A. Dillon, Cy. Engr.

UPPER SANDUSKY, O.—A number of streets will be improved this season, according to reports.

YOUNGSTOWN, O.—Councilman Beecher is reported to have stated that Hazel and Phelps Sts. will be paved this season.

FORT WAYNE, IND.—F. M. Randall, Cy. Engr., has been instructed, according to reports, to prepare plans and specifications for laying sidewalks in several streets.

INDIANAPOLIS, IND.—Bids are asked for furnishing 400,000 paving brick, according to reports. B. J. T. Jeup, Cy. Engr.

DETROIT, MICH.—Press reports state that this city will purchase 2,250,000 bricks for paving purposes and sell them to the contractors as needed.

SAGINAW, MICH.—Jefferson Ave. is to be paved with asphalt, according to reports. H. E. Terry, Cy. Engr.

PEORIA, ILL.—Bids are asked until May 6 for constructing about 4,000 sq. yds. of asphalt pavement and about 2,600 lin. ft. of cement curb and gutter on Bigelow St., as stated in our advertising columns. Will O. Clark, Comr. Pub. Wks.; A. D. Thompson, Cy. Engr.

KANSAS CITY, MO.—Bids are asked until April 30 for asphalt paving on Charlotte St., from 16 to 18th St. Henry A. Wise, Cy. Engr.——The council has passed resolutions providing for paving in 29th, Oak, 8th and Wyandotte Sts.

CISCO, CAL.—Reports state that a toll road will be built between this town and Truckee, a distance of about 30 miles.

VENTURA, CAL.—Bids are asked until May 5 for grading, widening and constructing Thompson Ave., from the town limits to the bridge. A. S. Kenagy, Clk. Supervisors.

MANUFACTURING PLANTS.

THORNTON, R. I.—Chas. Fletcher is reported to have awarded the contract for constructing a new woolen mill at this place. The main structure will be 200 × 50 ft., besides an extension of 120 ft.

ELMIRA, N. Y.—Local papers state that the Payne Engine Works is to be removed to Newburg, N. Y. The plant in the mean time is likely to be sold for a judgment of about $57,000. The Payne Engineering Co. has been organized to operate the plant in case of its removal. Stephen H. Payne and Albert G. Duncan may be addressed.

FULTON, N.Y.—The Victoria Paper Mills Co. is making extensive additions and alterations to its plant, including the construction of a new mill building. The contract for furnishing and erecting the steel work has been awarded to the Berlin Iron Bridge Co., of East Berlin, Conn.

NEW YORK, N. Y.—Plans have been filed by the H. A. Cram estate for a one-story factory building, to cost about $10,000. Arch., Wm. C. Carlisle, 311 East 150th St., New York.

ALLEGHENY, PA.—The Oliver & Snyder Iron & Steel Co. is reported as having plans prepared for an additional blast furnace in Allegheny. It owns the Edith Furnace, and, it is said, will improve it at a cost of about $30,000.

CARLISLE, PA.—The Pennsylvania Silk Co. will erect a large silk mill and purchase new machinery; capital stock, $35,000.

EASTON, PA.—It is reported that R. & H. Simon have recently awarded contracts for building extensions to their plant.

PHILADELPHIA, PA.—Robert Foerderer proposes to erect an addition to his kid leather manufacturing plant at Frankford.——It is said that the Acme Mfg. Co. will soon build a two-story 35 × 80 ft. addition to its plant.——John Wiggins, 1220 Filbert St., is said to have been awarded the contract for constructing a six-story factory and office building. Archs., Hewitt Bros., Bullitt Bldg.——Bids are reported by local papers as being secured by Lewis Havens for an eight-story factory, 40 × 152 ft., at 12th St. and Buddens Alley, between Arch and Race Sts.

TYRONE, PA.—It is reported that the construction of a shoe factory in this place will soon begin. Pres., W. L. Hicks; Supt., N. A. Hughes; Gen. Mgr., J. W. Howe.

SNOW HILL, MD.—Wm. C. Tarr, agent for Mrs. Drexel, has sold the Klej Grange property to a German syndicate for $20,000. The owners, it is reported, propose to erect thereon a beet sugar factory.

LYNCHBURG, VA.—The Big Island Paper Mill Co.'s property has been bought by W. J. Smith, of Camden, N. J., for $30,000, who will at once, it is stated, equip the same with new machinery and start up the mill. It was built eight years ago by Richmond and Lynchburg capitalists at a cost of $120,000, but had not been in operation lately. The mill's chief product, under the new ownership, will be wall-paper, and other machinery to manufacture same will be purchased at once.

CHARLESTON, W. VA.—It is probable work will soon be begun on the Charleston Mills at a cost of about $350,000. Pres., Chas. O. Witte; Secy. and Treas., E. H. Sparkman.

SALISBURY, N. C.—Nesbitt & Pressley will at once build a roller flour mill on Coddle Creek with capacity of 25 bbls. per day.

POULAN, GA.—The Aberdeen Cotton Mills Co. is reported as considering the question of erecting an additional spinning plant to its mills, which have been under construction for some time. Capital stock, $100,000. J. H. Tifton, Poulan, and Henry H. Negley, of Pittsburg, Pa., are interested.

BIRMINGHAM, ALA.—Press reports state that the construction of the Indian Head Cotton Mills, to cost $600,000 and have a capacity of 35,000 spindles, was commenced April 26. Six hundred acres of valuable mineral lands were given as a site. The Flynt Building & Construction Co., Palmer, Mass., has the contract for constructing the buildings. Stephen Green, of Lockwood, Green & Co., Boston, Mass., is the architect, and J. F. Gallivan, of Boston, Superintendent of Construction. Pres., Arthur Amory, Boston.

NEWARK, O.—The Consumers' Brewing Co. is reported as arranging for the construction of its proposed brewery in East Newark. Capital stock, $75,000. Pres., Chas. Andrae; Secy., H. R. Gill.

SANDUSKY, O.—The Art Portland Cement Co. is reported to have decided to build an extension to its plant.

LITTLE ROCK, ARK.—Wm. W. Bierce, of New Orleans, La., has been awarded the contract by the Union Compress Co. for building its cotton compress in this city at a cost of about $100,000. It is said that 2,000,000 brick and 1,500,000 ft. of lumber will be required. Pres., Henry M. Cooper, Little Rock.

SEDALIA, MO.—Work, it is stated, will probably soon be begun on the proposed shops in this place for the Missouri, Kansas & Texas R. R. Co., to cost about $100,000. There will be a car-shop 224 × 110 ft., to cost $16,740; paint shop, 164 × 150 ft., to cost $18,830, machine and blacksmith's shop, etc. Gen. Mgr., T. C. Purdy, St. Louis, Mo.

GALVESTON, TEX.—The "News" states that the owners of West Galveston, nine miles from this city, have made contracts whereby there will be erected there about 16 factories, to cost an average of $12,000. These factories include those of the McCollum Mfg. Co., in which D. W. McCollum, of St. Louis, Mo., and M. A. McLaughlin, of East St. Louis, Ill., are interested; the Kouble Plow Co., of St. Louis; the Pollock Chair Co., of Williamsburg, O., and the Texas Hose, Rubber & Belting Co. Secy., Chas. Clifford, Galveston.

GAS PLANTS.

PITTSBURG, PA.—Local papers state that the supreme court has decided that the Pittsburg Illuminating Gas Co. cannot be incorporated but that the Consolidated Gas Co. has the exclusive right to furnish gas in this city.

YORK, PA.—The York Gas Co. has voted to increase its capital stock from $100,000 to $200,000. This increase, it is stated, will be used for enlarging and improving the plant.

LOUISVILLE, KY.—The Louisville Gas Co. is making arrangements for extending its plant at a cost of about $200,000.

CELINA, O.—The Junior Oil & Gas Co., Richmond, Ind., John H. Cutter, Pres., contemplates the construction of a gas plant in this town. Mayor, Eli Bryson.

DAVENPORT, IA.—The Consolidated Gas Co. has decided to extend its mains for about five miles. E. C. Walsh, Clinton, Ia., and C. H. Walsh, Burlington, Ia., are interested.

NEW COMPANIES.—Bedford County Oil & Mineral Prospective Co., Alum Bank, Pa.; $5,000, with $500 paid in; to prospect for oil and gas; Treas., John H. Moser, Osterburg, Pa.

Prosperity Oil & Gas Co., Fairmount, W. Va.; $100,000, with $1,250 paid in; Chas. W. Swisher, A. C. Reynolds, John A. Clark, C. L. Michael, Fairmount.

Deseret Light & Power Co., Salt Lake City, Utah.; $5,000, with full amount paid in; incorporated in New Jersey to furnish gas; C. Shirreff Hilton, Geo. H. Sullivan, W. J. Curtis.

Mutual Benefit Light & Heat Co., San Francisco, Cal.; $500,000; to buy and operate patents, methods and inventions in gas manufacturing, etc.; directors: William P. Harrison, Belvedere; R. S. Lawrence, John H. Roberts, J. Munsecre Chase, Samuel S. Green, San Francisco.

Peruvian Oil Co., Charlestown, W. Va.; $100,000, with $500 paid in; to develop oil and gas lands: John D. White, James H. Nash, F. A. Smith, H. L. Wherle, Charlestown.

People's Light, Heat & Power Co., Denver, Colo.; $700,000; to manufacture and sell illuminating gas at 75 cts. per 1,000 cu. ft., and heating gas at 60 cts. per 1,000 cu. ft.; William Ridley, Moritz Barth, E. F. Hallack, George Tritch and Gilbert B. Fishel.

MISCELLANEOUS CONTRACTS.

PARK WORK.—Buffalo, N. Y.—The council has voted to appropriate $25,000 for improving Niagara Square.

DREDGING.—Newark, N. J.—The property owners have asked the council to appropriate $10,000 for dredging in the Passaic River.

DAM.—Minnetonka, Minn.—County Surveyor Abbot, Minneapolis, has submitted estimates for a new dam at Minnetonka, to cost about $6,000.

DREDGING.—Buffalo, N. Y.—The board of public works has been directed to ask for bids for dredging at the northern end of the old government breakwater.

DRAINAGE DITCH.—Tekamah, Neb.—The county commissioners are reported to have decided to construct a drainage ditch several miles long to empty into Lake Quinnebaug.

FIRE ENGINE, HOSE CART, ETC.—Valley Junction, Ia.—Propositions are reported as being received for furnishing a chemical fire engine, hose cart and hook and ladder truck.

FIRE BOAT.—Pittsburg, Pa.—Local papers state that the contract will soon be awarded by J. O. Brown, Dir. Pub. Safety, for constructing and furnishing a steel stern-wheel fire boat.

PILES.—Boston, Mass.—Bids are asked until May 3 for furnishing and driving 500 spruce piles for a sewer in the railway yard of the southern station. Benj. W. Wells, Supt. of Streets.

MILITARY SUPPLIES.—West Point, N. Y.—Bids are asked until May 20 for furnishing plumbing, gas, water and building materials. Capt. J. B. Bellinger, Q. M., U. S. A., West Point.

DREDGING.—San Pedro, Cal.—The secretary of war is reported as having prepared the advertisement calling for bids for improving San Pedro Harbor, estimated to cost about $2,900,000.

HOSE.—New York, N. Y.—Bids are asked until May 12 for furnishing 11,100 ft. of ¾ to 2½-in. cotton and rubber hose. A. S. Kimball, Deputy Q. M. Gen., Army Bldg., Whitehall St., New York.

CONCRETE WALLS, ETC.—Fort Schuyler, N. Y.—Bids are asked until May 6 for constructing a concrete retaining wall and repairing causeway at this fort. M. G. Krayenbuhl, Q. M., Fort Schuyler.

TELEPHONE.—Clarksburg, Md.—It is stated that the Boyd Telephone Co. of this place is contemplating extension to its lines. Dr. J. E. Deets, Pres.; W. B. Burdette, Secy., and L. B. Price, Gen. Mgr.

BOILERS.—Cleveland, O.—Bids are asked until May 19 for furnishing water-tube boilers, which are to be equipped with mechanical stokers, ash conveyor, smoke flue, etc. Geo. R. Warden, Dir. Pub. Wks.

CONDUITS.—Cambridge, Mass.—The West End St. Ry. Co. has been granted permission to construct a system of conduits for its cables in Boyleston and adjacent streets to connect with the new power house.

CONDUIT.—St. Louis, Mo.—The Bell Telephone Co. is reported to have awarded to Bagnell & McDonald, St. Louis, the contract for constructing about 20 miles of conduits for its wires. Gen. Mgr., Geo. F. Durant.

TUNNEL.—Aspen, Colo.—Contracts will be let at once for driving the Newman tunnel belonging to the Castle Creek Tunnel & Power Co., according to reports. There will be 1,600 ft. in all to be driven. Gen. Supt., H. E. Woodbury.

PARK WORK.—Jersey City, N. J.—The street and water board is reported to have directed the chief engineer to prepare plans and specifications for improving the new parks, to cost about $70,000. Commissioner Weastell may be addressed.

CHEMICAL ENGINE AND HOSE WAGON.—Amsterdam, N. Y.—Bids are asked by the council until May 4 for furnishing a chemical fire engine and hose wagon combined, as stated in our advertising columns. Thos. Hazlett, Cy. Clk.

DAM.—Chicago, Ill.—The committee has recommended to the drainage board that the contract for constructing the bear trap dam at the Lockport controlling works, as advertised in Engineering News, be awarded to the Griffiths & McDermott Construction Co. at $60,335.

CARS.—Shanghai, China.—Press reports state that the Imperial Chinese Ry. Administration wants bids for furnishing 26 passenger and freight cars. The call for bids and the specifications were issued about Feb. 24. Address H. Hilderbrand, Sung-Wa Ry., Temple of Heaven, North Honan Road, Shanghai.

TUNNEL.—Boston, Mass.—The question of constructing a tunnel to East Boston, at a cost of about $2,400,000, is being discussed by the committee on metropolitan affairs and the citizens' trade association of East Boston. Joseph H. Barnes, Jr., E. M. McPherson and Mayor Quincy are said to be in favor of the tunnel.

DREDGING AND ROCK EXCAVATION.—New York, N. Y.—Bids are asked until May 3 for dredging at Mattawan Creek and Elizabeth River, N. J., and until May 26 for dredging and rock excavation in East Chester Creek, N. Y., as stated in our advertising columns. Maj. H. M. Adams, U. S. Engrs., 39 Whitehall St.

COAL MINING.—Cunmock, N. C.—Another coal deposit is to be developed at this place, where there is now a large mine in operation. J. L. Mitchell, of Tyler, Pa., and G. H. Losey, of Wilmington, Del., have bought the coal-bearing land from D. F. Caldwell, of Greensboro, N. C., for $50,000. The mine will be opened at once.

TELEPHONE.—Spartanburg, S. C.—At a meeting of the stockholders of a new anti-Bell Telephone Co., held at this place last week, a committee of three was appointed to apply for a charter, etc., and other steps taken to begin the construction of the line at once. A. H. Tuttehill, S. J. Simpson, D. E. Converse and C. H. Heny are interested.

MONUMENT.—Anderson, S. C.—The Ladies' Memorial Association of this place has received permission from the county commissioners to erect a monument to the Confederate dead on the square where the new court house is to be ordered. The ladies will let the contract for the erection of the monument some time this spring or summer.

DRAINAGE CANAL.—Marysville, Cal.—Sutter Co., Jos Ashford and others, property owners along the Feather River, have signed a petition for the formation of a drainage district in order to drain their land of the seepage water from the river. The petition will probably be presented to the board of supervisors at its next meeting. If granted, a tax will be levied and the work of digging the drainage canal through to the tules will be commenced.

DITCH WORK.—Bellefontaine, O.—Wilbur A. Glenn, Engr., Bellefontaine, has completed surveys and estimates for the construction of the Miami River & Red Slough Joint Ditch Improvement, the work consisting of ten miles of straightening, deepening and widening of the Miami River, and fifteen miles of tributary streams; estimated

cost, $48,000. This improvement, our correspondent states, will be the most complete system of ditch work ever constructed in this part of Ohio, draining about 38,000 acres of land.

STONE CRUSHER, ETC.—Portland, Me.—The lowest bids opened by Lt.-Col. A. N. Damrell, U. S. Engrs. April 24, as advertised in Engineering News, were as follows: For concrete mixer, Elliott Machine Co., Baltimore, Md., $392; stone crusher, John H. Houghton, Boston, $2,775; engine and boiler, Fred. S. Harrison, St. Paul, Minn., $619; hoisting engine, Elliott Machine Co., $417; trolley, Thos. Laughlin Co., Portland, $12; also lowest on dump cars, at $75 each; steel wire rope, $4.95 a lin. ft.; 2 guide sheaves, 80 cts.; steel rails, 1½ cts. a lb.; and spikes. The other bidders were the Coulter & McKenzie Machine Co., Bridgeport, Conn.; Fayette L. Wright, Boston, and S. C. Forsaith Machine Co., Manchester, N. H.

PNEUMATIC TUBES.—Boston, Mass.—Press reports state as follows: Negotiations are in progress between the post office department and a company of Boston capitalists for the operation of a pneumatic tube mail service system in Boston, from the post office to the North Union Station, a short circuit. The preliminary arrangements have been almost completed, and the contract will probably be closed soon. The system will be substantially the same as that in New York, for which a contract for four years was recently let to a syndicate represented by John L. Mitholland. The contract will call for two 8-in. tubes and carriers of a little less than 7 ins. caliber. Both the Boston and New York tube systems will be built on larger plans than that of Philadelphia, the only other city having pneumatic mail facilities.

CONTRACT PRICES.

STREET SUPPLIES.—Baltimore, Md.—The following contracts were awarded on April 1 for furnishing cement, flagstone (2 ft. wide, 6 ins. thick and at least 5 ft. long), gutter stone (10 ins. wide, 6 ins. thick and at least 3 ft. long) and lumber for general repair work during 1897: B. Mallis & Co., Cumberland cement, 36 cts. per 100 lbs. in bags, 38 cts. in bbls.; J. N. Du Barry, Jr., & Co., Atlas cement at 55¾ cts. in bags, 59½ in bbls.; Giant cement, 57 cts. and 62 cts.; Hern Bros., German cement, 60¾ cts. in bbls.; Burnham English cement, 60 cts. in bbls.; Union Rosendale cement, 35½ cts. in bags and 38½ cts. in bbls. National Building Supply Co., Ulster Co. cement, 40 cts. in bbls. John T. Curley & Co., gutter stones, 21 cts. per lin. ft.; flagstones, 22½ cts. per sq. ft.. M. D. Gill & Son, Georgia pine lumber, all sizes, $17.50 per M. ft., B. M.; North Carolina pine, $10.50; oak, $35. W. A. Hanway, Cy. Comr.

REPAIRING PIER.—St. Joseph, Mich.—Capt. C. McD. Townsend, U. S. Engrs., Grand Rapids, Mich., opened the following bids April 22 for repairing the government pier at this place, as advertised in Engineering News:

Bids for Repairing Government Pier at St. Joseph, Mich., Opened April 22, 1897.

Bidder.	Securing in place material to be furnished by government. Removing old work, above water, 375 lin. ft.	White oak rd. piles, 96.	White oak and pine timber, 105,900 ft.	White pine plank, 36,000 ft. B. M.	White pine plank, 82,080 ft. B. M.	Furnishing and securing in place—Wrought iron or steel. Drift bolts, 14,000 lbs.	Screw bolts, 1,455 lbs.	Carriage bolts, 2,530 lbs.	Tie rods, 5,860 lbs.	Spikes, 1,845 lbs.	Total.
Eslow & Munroe, Charlevoix, Mich.	$1.70	$2.90	$5.25	$5.00	$26.00	$0.02	$0.02¼	$0.02¼	$0.02¼	$0.03½	$4,354
George Cooper, Manitowoc, Wis.	1.50	2.00	4.75	3.00	30.00	.029	.029	.029	.029	.029	4,575
Jno. J. Granville, Saginaw, Mich.	2.00	4.50	5.50	7.00	25.00	.025	.05	.05	.05	.03	4,970
Nelson J. Gaylord, Ludington, Mich.	2.50	3.00	4.50	2.00	33.25	.02¼	.02¼	.02¼	.02¼	.02¼	5,083
J. M. Allmendinger, Benton Hrbr, Mich	3.37	3.00	6.00	4.00	25.50	.02	.03	.03½	.03½	.02½	5,090
W. McIvor, Marseilles, Ill.	2.00	4.00	6.50	3.75	29.00	.03	.03½	.03½	.03	.03½	5,140
Chicago Star Const'n & Dredge Co.	2.50	1.50	6.50	4.50	34.00	.03	.03½	.03½	.03½	.03½	5,554

LOCKS, ETC.—Nashville, Tenn.—Capt. John Biddle, U.S. Engrs., opened the following bids April 12 for construction of locks Nos. 6 and 7, and abutments of dams, Cumberland River, as advertised in Engineering News:

Lock No. 6 and abutment of dam.

Items.	I. V. Hoag, Jr, Pittsb'g	Held-maier & Neu, Chicago	Christie & Lowe, Chicago	McArthur Broth-ers Co., Chicago
Earth excavation	$0.75	$0.75	$0.40	$0.50
Rock excavation	3.00	2.00	2.00	2.50
Approach excav., rock	3.00	1.10	1.20	.80
Approach excav., earth	.75	.40	.80	.25
Embankment	.60	.35	.30	.25
Stone filling	2.00	1.00	.50	.25
Puddling	2.00	.75	1.50	.75
Concrete	7.00	14.00	5.00	8.00
Paving	5.00	4.50	4.00	5.00
Riprap, hand placed	3.00	2.50	3.50	1.75
Sills	28.00	21.25	20.00	18.00
Hollow quoins	30.00	25.45	35.00	22.00
Special stones	28.00	21.50	20.00	16.00
Coping	24.00	25.45	20.00	17.00
Pointed face	22.00	18.30	16.50	11.50
Square faced rubble	13.00	12.40	8.50	8.00
Backing	12.00	10.90	6.00	6.25
Brick masonry	17.00	17.00	15.00	10.00
Cofferdam filling	1.50	1.50	1.50	.70
Lumber in place	30.00	32.00	60.00	40.00
Timber, permnt. const'n	65.00	28.00	35.00	35.00
Bolt holes in masonry	.50	2.00	1.00	.20
Wire fence in place	.50	.10	.15	.05
Total, No. 6	$286,501	$242,210	$194,299	$164,872

Lock No. 7 and abutment of dam.

Items.	I. V. Hoag, Jr, Pittsb'g	Held-maier & Neu, Chicago	Christie & Lowe, Chicago	McArthur Broth-ers Co., Chicago
Earth excavation	$1.00	$0.75	$0.40	$0.50
Rock excavation	5.00	2.00	2.50	3.00
Embankment	.75	.35	.35	.25
Stone filling	3.00	1.00	.80	.60
Puddling	2.00	.75	1.50	.75
Concrete	8.00	14.50	5.00	8.00
Paving	5.00	4.50	3.00	4.50
Riprap, hand placed	3.00	2.50	2.50	2.10
Sills	29.00	21.25	20.00	18.00
Hollow quoins	31.00	25.35	35.00	22.00
Special stones	29.00	21.15	20.00	16.00
Coping	25.00	25.35	20.00	17.00
Pointed face	23.00	18.20	16.50	11.50
Squared faced rubble	14.00	12.35	8.50	7.50
Backing	13.00	10.75	6.00	6.25
Brick masonry	17.00	18.00	15.00	10.00
Cofferdam filling	1.50	1.50	1.40	.70
Lumber in place	30.00	33.00	55.00	40.00
Timber, permnt const'n	65.00	29.00	35.00	35.00
Bolt holes in masonry	.50	2.00	1.00	.20
Wire fence in place	.50	.10	.15	.05
Total, No. 7	$337,822	$269,299	$213,195	$181,690

ASPHALT PAVING.—New York, N. Y.—The following bids were opened April 15 for repaving Alexander Ave., from South Boulevard to Third Ave.:

Bidder.	Asphalt, 15,500 sq. yds.	Curb, 2,400 lin. ft.	Total.
California Asphalt Pav'g Co.	$2.69	$0.64	$43,231
Warren-Scharf Asp. Pav. Co.	2.72	.68	43,792
Barber Asphalt Paving Co.	2.79	.62	44,733
Sicilian Asphalt Paving Co.	3.60	.65	57,360

BRICK PAVING.—Olean, N. Y.—E. E. Allen, Supt. of Streets, writes us that the following bids were opened April 15 for brick paving, as advertised in Engineering News; some of the contractors bid on several varieties of brick; prices given in table are for the Mack and the Park brick, with 4-in. curbing:

Bids Received at Olean, N. Y., April 15 for Brick Paving.

Bidder.	Excavation—For pvmnt, 1,500 cu. yds.	For filling sdwlks, 10,000 cu. yds.	Brick, 6-in. con. fndatn, 10,500 sq. yds.	4-in. curbg, 3,500 ft.	4-in. circular curbg, 60 ft.	Curbing reset, 10 ft.	4-in. tile, 10 ft.	Special brick for st. ry trk, 3,700 ft.	Total.
W. H. Simpson, Olean, N. Y.	$0.30	$0.35	$1.52	$0.44	$0.75	$0.10	$0.04	$0.005	$21,515
Jamestown Const'n Co., Jamestown, N. Y.	.25	.44	1.42	.48	.58	.25	.20	...	21,404
W. H. Mandeville & Co., Olean, N. Y.	.30	.40	1.45	.45	.65	.01	.01	...	21,289
Eugene Fee, Olean, N. Y.	.30	.25	1.57	.42	.75	.01	.01	.00¼	20,959
Edw. H. Post, Wilkes Barre, Pa.	.20	.30	1.37	.43	.68	.20	.20	.01	19,272
Jas. McCloud & Co., Williamsport, Pa.	.20	.21	1.36	.33	.45	.20	.05	...	17,865

MACADAM ROAD.—Camden, N. J.—The following bids were opened at Camden, N. J., April 21 for the construction of three miles of stone road, known as Browning's Road; as advertised in Engineering News of April 15. J. J. Albertson, County Engr.:

Bidder.	Telford, 10 ins.	Macadam, 6 ins.	Excavations, per cu. yd.	Gravel, per cu. yd.	Underdraining, per ft.	Extra cartage, cu. yd.
Wm. H. Ireland	$0.75	$0.54	$0.20	$0.70	$0.15	$0.15
John F. Shanley	.74	.51	.23	.69	.18	.9
*Kuhn & Allen	.70	.51	.30	.70	.18	.15
Johnson & Wickersham	.79	.49	.20	.55	.14	.10

*Contract awarded to Kuhn & Allen.

RESERVOIR.—Jacksonville, Fla.—R. N. Ellis, Supt., writes us that the following bids were opened April 20 for the construction of a reservoir: S. S. Leonard, brick laid in cement, $15.75 per M.; Portland cement concrete in place, $6.90 a cu. yd.; Portland cement plaster, 30 cts. a sq. yd.; Knoxville Building & Construction Co., $16.50, $7.25 and 33⅓ cts., respectively. A local paper states that the contract was awarded to S. S. Leonard.

SEWER.—Albany, N.Y.—The following bids were opened April 15 for constructing the Judson St. sewer, between 2d and 3d Sts.:

Quantities.		J. Doyle.	P. H. Reiley.
20-in. vit. pipe., extra heavy	1,335 ft.	$0.95	$0.77
18-in. " " " "	1,020 "	.75	.60
6-in. vit. pipe, house conns.	3,200 "	.15	.10
20-in. T branches	60...	4.00	3.41
18-in. " "	47...	3.50	2.72
Manholes	7...	75.00	70.00
Lateral trenches	2,840 ft.	.70	.30
Trenches: Less than 10 ft. dp.	190 "	1.00	.60
10 ft. to 12 ft. deep	166 "	1.50	.80
12 " " 14 " "	361 "	2.00	1.10
14 " " 16 " "	436 "	2.50	1.32
16 " " 18 " "	346 "	3.00	1.45
18 " " 20 " "	469 "	3.50	2.00
20 " " 22 " "	372 "	4.50	2.50
22 " " 24 " "	241 "	5.00	4.00
6-in. bends	220...	.50	.28
6 × 8-in. or 8 × 10-in. reducers	15...	1.50	.60
6-in. Breeches junction	84...	1.00	.80

GRADING.—New York, N. Y.—The following bids were opened by the department of street improvements, Third Ave. and 177th St., for grading Brook Ave., from 165th St. to Wendover Ave.:

Bids Received by Department of Street Improvements, New York, for Grading in Brook Ave.

Bidder	Excavation, 400 cu. yds.	Filling, 4,400 cu. yds.	Curb, 8,350 ft.	Flagging, 32,200 ft.	Bridge, 1,800 ft.	Wall, 200 cu. yds.	Fence, 7,700 ft.	Pipe, 100 ft.	Lumber, 1,000 ft.	Total.
M. J. Leahy	$0.05	$0.28	$0.45	$0.18	$0.45	$1.00	$0.40	$0.10	$1.00	$25,995
P. Minehan	.35	.25	.49	.19	.45	1.75	.35	.50	.01	25,255
F. Thielmann	.25	.32	.50	.20	.50	3.00	...	1.00	...	26,395
J. C. Rodgers & Son	.01	.25	.46	.16	.40	2.50	.40	1.00	20.00	24,417
W. F. Murray	.80	.18	.69	.20	.45	3.00	.30	.60	...	24,258
George Clark	.40	.16	.58	.22	.50	1.75	.20	.01	.01	21,918

ASPHALT PAVING.—Cleveland, O.—The following bids were opened April 14 for paving with asphalt:

Bidder.	Woodland Ave.	Hamilton St.	Scranton Ave.
Chas. I. Williams, Utica, N. Y.	$7,340	$9,241	$44,162
Claflen Pavg & Contracting Co.	8,240	10,465	48,814
Warren-Scharf Asp. Pav. Co.	8,476	11,750	55,240
Ohio Bermudez Asphalt Co.	8,847	12,358	57,157
Mack Paving Co.	8,874	11,864	53,907

For the work in Scranton Ave., Mr. Williams bid $2 a sq. yd., and the others $2.24, $2.59, $2.67 and $2.55, respectively, in the order given in table. The board of control has voted to award the contracts to the lowest bidder.

FILLING.—Tompkinsville, N.Y.—Lieut.-Col. D. P. Heap, U. S. Engrs., opened the following bids April 21 for filling 10,000 cu. yds. behind bulkhead wall at lighthouse depot, as advertised in Engineering News: Frank W. McNeal, 80 and 82 Reade St., New York (good cellar dirt), 19½ cts. a cu. yd. delivered in place; 10 cts. delivered on wharf; Terrence Morgan, Rosebank, N. Y. (cellar dirt), 18 cts. in place; Dennis J. Darcey, Port Richmond, N. Y. (earth and soapstone), 69 cts. in place; Joseph Johnson, West New Brighton, S. I., N. Y. (cellar dirt), 24 cts. in place; Jas. H. Dailey, 236 Union St., Brooklyn, N. Y. (clean earth), 9¾ cts. in place, 7 cts. on wharf; C. McLean, No. 1 Broadway, N. Y. city (cellar dirt and earth), 18 cts. in place; William L. Beers, 72 Trinity Place, N. Y. city, 20 cts. in place; Naughton & Co., 258 Broadway, N. Y. city, 27 cts. in place; A. A. Bouker, 110 Wall St., N. Y. city, 15 cts. in place, 5 cts. on wharf; Wm. H. Gautier & Co., No. 1 Exchange Place, Jersey City, N. J. (gas house lime and ashes and cellar dirt), 30 cts. in place.

MACADAMIZING.—Long Island City, N.Y.—John J. McLaughlin, County Engr., has sent us the following statements of the additional bids opened April 13 for macadamizing, as advertised in Engineering News; the detailed bids for three contracts for which bids were opened April 13 were published in our issue of April 22:

Fresh Meadow Road; 16,300 lin. ft.; 8 ins. Macadam.

Quantities.		Twombly & Eldert, Jamaica, N. Y.	Chapman & Pitch, New York city.	T. F. Tuohey & Co., Flushing, N. Y.*
Embankment	40,800 cu. yds.	$0.35	$0.30	$0.28
Macadam	32,600 sq. yds.	1.12	1.07	1.06
Irn pipe culverts	70,000 lbs.	.02	.02	.02
Catch basins	3.	50.00	45.00	40.00
Cobble pavement	800 sq. yds.	.45	.45	.42
Total		$52,702	$49,017	$47,836

Black Stump Road, Fresh Meadow Road and Union Ave.; 25,300 lin. ft.; 8 ins. Macadam.

Quantities.		Smith & Lutjens, L. I. City, N. Y.	D. C. Bouker, Jr., New York city.*	W. F. McCabe, Mamaroneck, N. Y.
Embankment	73,400 cu. yds.	$0.23	$0.20	$0.26
Macadam	50,600 sq. yds.	1.02	1.00	.91
Cobble pavement	1,320 " "	.61	.45	.30
Iron pipe culverts	96,000 lbs.	.02	.015	.015
Catch basins	2.	55.00	50.00	40.00
Total		$71,329	$67,414	$67,046

* Awarded contract.

SEWERS.—New York, N. Y.—The following bids were opened April 14 for constructing sewers in streets within the district bounded by 15th St., 4th Ave., Randall St., White Plains Ave., Sheridan St., and the Bronx River, in the old village of Williamsbridge; the contract may be readvertised as the appropriation is $100,000 and the lowest bid, made by J. P. Armbrust & Co., is about $118,000:

Quantities.		Norton & Dalton, 125th St. and Lex. Av.	J. P. Armbrust & Co., 33 Broadway.	P. F. Brennan, 178 Washington Ave., M. Redmond, Jerome Ave., Woodlawn.	Michael Brennan, New York City.
Pipe sewers:					
24-in.	1,800 lin. ft.	$5.60	$6.25	$6.30	$3.75	$2.95
25-in.	355 " "	4.60	5.40	5.25	3.75	2.95
18-in.	4,455 " "	4.10	4.95	4.70	3.75	2.95
15-in.	6,360 " "	3.60	3.60	4.00	3.75	2.95
12-in.	2,350 " "	3.10	3.90	3.00	3.75	2.95
10-in.	3,050 " "	2.50	2.20	3.00	3.75	2.95
8-in.	9,100 " "	3.50	2.00	2.50	3.75	2.95
6-in.	9,410 " "	2.50	1.05	2.00	3.75	2.95
Manholes	146 each	75.00	72.50	40.00	50.00	50.00
Rub. masonry	375 cu. yds.	4.00	5.00	2.50	2.50	3.00
Concrete	20 " "	.01	6.00	1.00	.01	5.00
Broken stone	100 " "	.01	2.50	1.00	.01	1.00
Timber	75,000 ft. B.M.	20.00	25.00	5.00	25.00	20.00
Manhole heads	19 each	25.00	16.00	25.00	50.00	50.00
Time, to complete, days		600	300	365	400	350

PIPE SEWER.—Scranton, Pa.—The following bids were received April 22 for constructing a lateral sewer in Washington Ave.; length of sewer, 1,975 ft.; depth, 9.5 ft.; the price includes 8 manholes, 5 basins, and 55 house connections to curb line (average length, 20 ft.); size of pipe, 8, 10 and 12-in. terra cotta and 16-in. iron: O'Hara Bros., $1.39 per lin. ft.; Dunn Bros., $1.62; P. T. Mulligan, $1.39; P. J. Thornton & Co., $1.54; Stephen Flanagan, $1.70. Also the following for system of sewers in Green Ridge; length, 1,953 ft.; depth, 11 ft.; price includes 15 manholes, 7 basins, and 60 house connections (average length 20 ft.); size of pipe, 8, 10 and 12-in.: O'Hara Bros., $1.49 per lin. ft.; Dunn Bros., $1.62; P. T. Mulligan, $1.44; P. J. Thornton & Co., $1.64; Stephen Flanagan, $1.65.

THE ACME POWDER CO.,
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COUNTY COURT HOUSE.

NOTICE TO CONTRACTORS.

FORT WAYNE, IND.

Notice is hereby given, that sealed proposals will be received by the Board of Commissioners of the County of Allen, Indiana, at Fort Wayne, up to the hour of 2 o'clock p. m., on the 15th day of May, 1897, for furnishing all of the material and doing all the work, including the cartage, tools, tackle and everything requisite for the building of the Court House, Power Station and Tunnel, according to the plans and specifications therefor, prepared by Mr. Brentwood S. Tolan, Architect, which have been adopted by the said Board of Commissioners, and are now deposited and on file in the office of the Auditor of said County.

Copies of said plans and specifications can be found at the offices of Brentwood S. Tolan, Architect, Fort Wayne, Indiana; Pierce & Richardson, Chicago, Illinois, who are Consulting, Electrical and Mechanical Engineers for the Architect; and the Engineering News, New York City.

Copies of full legal notices and blank forms of proposals and of bonds, will be furnished by the Auditor of said County upon request, and all proposals and bonds must be on the form so furnished, and in accordance therewith.

For the building of the Court House, and the doing of the general work included therewith, a bond in the sum of Two Hundred Thousand Dollars ($200,000) will be required.

The right to reject any and all bids is reserved.

By order of the Board of Commissioners of the County of Allen.

M. A. FERGUSON,
J. H. STELLHORN,
S. F. BAKER,
County Commissioners.

Attest:
C. W. EDSALL,
Auditor Allen County, Ind.
Fort Wayne, Indiana, March 31, 1897. 14-4t

COMPLETING TUNNEL.

DEPARTMENT OF PUBLIC WORKS,
BUFFALO, N. Y., April , 1897.

Sealed proposals will be received by the Board of Public Works, at their office, Room No. 1, City and County Hall, Buffalo, N. Y., until 11 o'clock a. m., on MAY 6TH, 1897, for the completion of the work on the Tunnel from the Pumping Station to the Inlet Pier and the work in connection therewith contracted to be done by A. C. Douglas by contract made on the 30th day of July, 1895, in accordance with terms and conditions of said contract and the plans and specifications forming a part thereof.

Plans and specifications and estimates of quantities can be seen, and printed forms of proposals and any desired information can be obtained, at the Office of the Bureau of Water.

The Department reserves the right to reject any and all bids. R. G. PARSONS,
16-2t Secy. Board of Public Works.

U. S. ENGINEER OFFICE, 136 Island St., Grand Rapids, Mich., April 20, 1897.—Sealed proposals for PIER EXTENSION at Muskegon Harbor, Mich., will be received here until 12 o'clock noon, May 19, 1897, and then publicly opened. Information furnished on application. C. M'D. TOWNSEND, Capt., Engrs. 16-4t

Proposals for a Supply of Pure, Wholesome and Potable Water.

HOBOKEN, N. J.

Sealed proposals will be received at the office of the Board of Water Commissioners of the City of Hoboken, N. J., on Friday, the 30th day of April, A. D. 1897, at 8 o'clock p. m. for a supply of pure, wholesome and potable water for the term of fifteen, twenty and twenty-five years respectively from the 1st day of November, A. D. 1898, in accordance with certain resolutions passed by the Board of Water Commissioners on the 8th day of April, 1897, a copy of which may be obtained upon application at the office of the Water Register in the City Hall in the City of Hoboken. Said proposals may also contain an option for the acquiring by the city of the land, water and water rights for such supply after five, ten, fifteen or twenty years.

Each bidder must accompany his proposal with a certified check for $50,000 drawn upon a national bank, payable to the Board of Water Commissioners of the City of Hoboken. Proposals must be enclosed in sealed envelopes, endorsed "Proposals for a supply of water for the City of Hoboken, N. J." directed to the Board of Water Commissioners of the City of Hoboken, N. J., and handed to the Register of said Board, in open meeting, when called for.

The successful bidder shall also furnish a bond, as required by said resolutions, in the sum of $250,000 upon the execution of the contract with two or more sufficient, individual sureties residing in Hudson County, or with an approved Surety Company, conditioned for the faithful performance of said contract. Said bond to be renewed every five years during the term of said contract, and to be approved as to form by the Counsel of the Board of Water Commissioners and as to the sufficiency of the sureties by the Board of Water Commissioners of the City of Hoboken. The Board, according to the terms of the resolutions, reserve the right to reject any and all proposals, if deemed for the best interest of the city so to do.

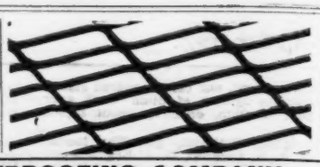
By order of the Board of Water Commissioners. HENRY LOHMANN, JR.,
Water Register.
Hoboken, N. J., April 9, 1897. 15-3t.

U. S. ENGINEER OFFICE, Army Building, New York, April 1, 1897.—To Whom It May Concern: Whereas, the wreck of the steamship "Ailsa" has been lying in the Main Ship Channel on the east side of the Narrows, New York Harbor, since February 29, 1896, has been abandoned by owners and underwriters, and is a dangerous obstruction to navigation, notice is hereby given to all persons interested in said vessel, her cargo and other property therein, that the wreck will be removed by the United States as a derelict, under authority of law. Sealed proposals for REMOVAL OF SAID WRECK will be received here until 12 m., May 1, 1897, and then publicly opened. Information furnished on application. WILLIAM LUDLOW, Lieut.-Col., Engrs. 15-3t.

U. S. ENGINEER OFFICE, 1637 Indiana Ave., Chicago, Ill., April 8, 1897.—Sealed proposals in triplicate for constructing eight miles or less of Eastern Section of ILLINOIS AND MISSISSIPPI CANAL, between Mile 8 and Mile 16, near Tiskilwa, Ill., for EXCAVATING LOCK PITS and CONSTRUCTING FOUNDATIONS for TWO AQUEDUCTS and ELEVEN LOCKS and for CONSTRUCTING TWO CONCRETE ARCH CULVERTS and SIX CAST IRON PIPE CULVERTS will be received here until 12 noon, central time, June 3, 1897, and then publicly opened. Information furnished on application here, or to Assistant Engineer, James C. Long, Tiskilwa, Ill. W. L. MARSHALL, Major, Engrs. 15-4t.

Other Proposals, Pages XXIV & XXVI.

EXPANDED METAL.
PITTSBURGH, 531 Wood Street.
NEW YORK, 256 Broadway.



STEEL LATH
For Plastering, Fireproofing Beams, Columns, Partitions, etc.

CENTRAL FIREPROOFING COMPANY,
Manufacturers and Contractors for Erection of Hollow Tile and Porous Terra Cotta . . FIREPROOFING
No. 874 BROADWAY, NEW YORK. Henry M. Keasbey, President.

GALESBURG VITRIFIED BRICK CO.,
Paving Brick Exclusively. GALESBURG, ILL.

MUNICIPALITIES
Having Contracts To Let should address

T. W. KINSER & SONS,
609-613 Chicago Stock Exchange, Chicago.
SPECIALTIES: Sewers, Water-Works, Paving, Railroads, Fills, Excavating and Masonry.

THE T. A. GILLESPIE COMPANY,
Engineers and Contractors.
Manufacturers of
RIVETED STEEL PIPE.
Pittsburg Office: Westinghouse Bldg.
New York Office: Havemeyer Bldg

CONTRACTORS who can take FIRST-CLASS MUNICIPAL BONDS in South and West in payment, and put in WATER-WORKS and ELECTRIC LIGHT Plants, will find it to their interest to correspond with me I make a specialty of this line. H. B. HALLIGAN, Suite 901, 155 LaSalle St., Chicago.

UTICA PIPE FOUNDRY CO.
CHARLES MILLAR & SON, Selling Agents, UTICA, N. Y.
Cast Iron Pipe and Specials, Hydrants, Gates, Pig Lead, etc. AKRON SEWER PIPE. Lead Pipe. Plumbers' Materials.

THE CAZIN WHEEL
(Patented March 16, 1897)
Operated by Water or Steam.
The only Power Wheel complying with requirements to maximum efficiency.
Send for Pamphlet.
American Impulse Wheel Co.
OF NEW YORK,
No. 120 Liberty Street.

NEW DRAINAGE SYSTEM OF NEW ORLEANS, LA. STEAM AND ELECTRICITY.

Sealed proposals will be received at the office of the Drainage Commission of New Orleans, La., Room No. 22, City Hall, up to NOON OF JUNE 1, 1897, for the construction of the following works, a separate bid being required for each class of work, as indicated below:

1. FOR A CENTRAL ELECTRIC POWER STATION.—This bid shall be for the construction of a central electric power station for the operation of the pumps at the several pumping stations, and shall include the foundations, buildings, boilers, generators, and lines to the pump motors, all complete. Deposit of $1,500 in cash or certified check, to accompany bid as guarantee of good faith. Bond of successful bidder, $80,000.

2. FOR PUMPING STATIONS OPERATED BY ELECTRICITY, as Follows: St. Louis pumping station No. 2, Metairie pumping station No. 6, Orleans pumping station No. 7 This bid shall include the erection and installation of the three pumping stations, complete, with foundations, buildings, suction, discharge and approach basins, pumps, and electric motors. Deposit of $1,500 in cash, or certified check. Bond of successful bidder, $75,000.

3. FOR PUMPING STATIONS OPERATED BY STEAM, as Follows: St. Louis pumping station No. 2, Metairie pumping station No. 6, Orleans pumping station No. 7. This bid shall include the erection and installation of the three pumping stations, complete, with foundations, buildings, suction, discharge, and approach basins, boilers, engines, pumps, pipes and stacks. Deposit of $1,500 in cash or certified check. Bond of successful bidder $75,000.

4. FOR LINED AND COVERED CANALS, viz.—St. Louis canal, Tributary canals. Bids to be at a price per unit of material, whether excavated or used in construction. This work will consist of not less than 10,000 feet of canals, eight (8) to twenty-eight (28) feet wide and six (6) to fifteen (15) feet deep. Deposit of $2,500 in cash or certified check. Bond of successful bidder. $125,000.

5. FOR OPEN AND UNLINED CANALS, which shall include excavation of new canals and enlargements of existing canals, with the construction of embankments along a part of the work. Approximate estimate 500,000 cu.yds. of excavation. Deposit of $700 in cash or certified check. Bond of successful bidder, $35,000.

Plans and specifications for the above works may be seen at the office of the commission on and after April 1, 1897.

The right is reserved to reject any and all bids. R. M. WALMSLEY, President.
F. G. FRERET, Secretary. 12-6t

U. S. ENGINEER OFFICE, 136 Island St., Grand Rapids, Mich., April 15, 1897.—Sealed proposals for REPAIRING Government Pier at Portage Lake, Mich., will be received here until 12 o'clock, noon, May 14, 1897, and then publicly opened. Information furnished on application. C. M'D. TOWNSEND, Capt., Engrs. 16-4t

NATIONAL HOTEL,
Cor. 6th St. and Pennsylvania Avenue, Washington, D. C.
Under new management, and entirely renovated from top to bottom. Steam heat, electric lights and new plumbing throughout. Opposite Pennsylvania Depot. Special attention paid to commercial travelers.
Rates: American plan, $2.50 per day up.
European plan, $1.00 per day up.
WALTER BURTON, Manager. O. G. STAPLES, Proprietor.

ESTABLISHED 1840
WALDO BROTHERS,
BOSTON, MASS.
ROSENDALE AND PORTLAND CEMENTS.
CONTRACTORS' AND MASONS SUPPLIES.
Largest Stock in N.E.
SEND FOR CATALOGUE.
N.E. AGTS. AKRON SEWER PIPE

DAM, POWER STATION, ETC.

MANCHESTER, N. H.

Sealed proposals will be received by the Union Electric Company, of Manchester, N. H., for building a wooden dam across the Piscataquog River in Goffstown, N. H., with masonry abutments, wing walls, and river walls; brick power house, one story, 88 ft. × 30 ft. inside; head gates, etc. Bidding will close at noon of Friday, May 14, 1897.

Estimated principal quantities are as follows:

600 M. ft. board measure timber in dam.
8,000 cu. yds. rock filling in cribs of dam.
3,000 " " rubble masonry in cement mortar.
600 cu. yds. dry rubble masonry.
250 " " rock excavation.
1,000 " " earth "
2,500 " " " filling.

Proposals must be made on the blank forms attached to specifications, and be accompanied by a certified check for $750, made payable to the Union Electric Company, said check to be forfeited by the successful bidder in case he neglects or refuses to execute the contract within five days from the date of the award to him.

Specifications may be obtained and plans seen at the office of the Union Electric Company, 14 Market St., Manchester, N. H., or at the office of Bartlett & Gay, Engineers, 852 Elm St., Manchester, N. H.

The Union Electric Company will furnish all lumber, cement, drift-bolts, ledge-bolts, brick and iron work of all kinds; the Contractor to furnish sand, stone, tools, forms and labor.

The Union Electric Company reserves the right to reject any and all bids.

UNION ELECTRIC COMPANY.
ROBIE WHITNEY, Pres.
GEORGE A. LEIGHTON, Treas.
EUGENE S. WHITNEY, Supt.
BARTLETT & GAY, Engineers, Manchester, N. H.

U. S. ENGINEER OFFICE, 39 Whitehall St., New York, April 22, 1897.—Sealed proposals for DREDGING at Mattawan Creek and Elizabeth River, N. J., will be received here until 12 o'clock m., May 3, 1897, and then publicly opened. Information furnished on application. H. M. ADAMS, Major, Engrs. 17-1t

BRIDGE ABUTMENTS.—Springfield, O.—The contract for the abutments of Snyder Park bridge over Buck Creek has been awarded to F. M. Townsend, Zanesville, O., whose bid was $4,064 for limestone or $6,507 for sandstone; itemized bids were as follows:

Bids Received for Constructing Abutments to Bridge at Springfield, O.

Bidder.	Sandstone, 1st class, 672 cu. yds.	Limestone, 1st class, 672 cu. yds.	Sandstone, 2d class, 140 cu. yds.	Limestone, 2d class, 140 cu. yds.	Excavation: Above water, 136 cu. yds.	Excavation: Below water, 180 cu. yds.	Concrete, 10 cu. yds.	Dressed stone, 300 sq. ft.
F. M. Townsend, Zanesville, O.	$7.75	$4.75	$7.05	$4.00	$0.20	$0.65	$6.25	$0.35
J. N. Kissner, Warsaw, O.	6.00	6.40	5.90	5.90	.25	.75	5.00	.25
Joseph Bolan, Springfield, O.	10.00	5.10	10.00	5.00	.35	1.25	5.00	.60
J. A. Swingle & Co., Zanesville, O.	5.65	4.85	4.95	4.00	.25	.60	4.50	.40
Cremmer & Johnson, Hicksville, O.	7.49	6.24	6.80	5.24	.20	.45	3.50	.18
Allen A. Fish, Springfield, O.	7.50	6.00	6.50	6.00	.30	1.15	5.00	.25
Yost & Sullivan, Springfield, O.	9.50	6.35	9.00	4.75	.18	.90	4.30	.43
Russell Bros., Springfield, O.	9.10	7.00	....	4.00	.15	1.00	....	....
Moyer & Spellacy, Columbus, O.	6.90	5.90	5.00	5.00	.20	.70	4.50	.40
John McDoneld, Cincinnati, O.	6.95	4.95	5.90	4.40	.35	.45	3.75	.75
Fisher & Fisher, Jackson, O.	8.50	6.50	8.50	6.50	.25	1.50	6.50	.40
W. M. Brode, New Comerstown, O.	6.40	5.90	6.20	4.90	.25	.75	4.90	.40

LAYING WATER MAIN.—Holyoke, Mass.—We noted April 22 under Water-Works, that the contract for laying 52,600 ft. of 20-in. cast-iron water pipe had been awarded to P. M. Lynch, at $24,065. The Springfield "Republican" states that this bid in detail was as follows: 48,000 cu. yds. excavation, $7,680; 2,500 cu. yds. rock excavation, $5,625; 1,000 cu. yds. excavation, $400; 25 cu. yds. rock excavation, $150; 5,000 cu. yds. embankment, $1,100; 100 cu. yds. embankment, $40; 100 cu. yds. embankment, $30; 250 sq. yds. paving, $250; 10 cu. yds. concrete, $45; 10 cu. yds. rubble, $50; 5,000 brick, $700; laying 56,200 ft. of 20-in. pipe, $7,306; laying 156 ft. of 24-in. pipe, $46.80; laying 115 ft. of 24-in. pipe, $7.50; laying 250 ft. of 10-in. pipe, $32.50; setting 7 valves, $42; laying 250 ft. of 8-in. pipe, $32.50; setting 6 valves, $36; setting 12 air-valves, $72; 10,000 ft. of lumber, $350. In the highest bid the price for laying the pipe was put at 40 cts. a ft., while Mr. Lynch bid 13 cts. a ft.

FOUNDATIONS FOR BEAR TRAP DAM.—Chicago, Ill.—The trustees of the sanitary district opened the following bids Apr. 16 for constructing foundations for bear trap dam and collateral work, as advertised in Engineering News:

Bids Received April 16 for Constructing Foundations for Bear Trap Dam at Chicago, Ill.

Bidder.	Metal and timber work in place.	Excavation, 6,272 cu. yds.	Concrete masonry: 1,899 c. yds.	Concrete masonry: 1,473 c. yds.	Concrete masonry: 813 c. yds.	Concrete masonry: 5,542 c. yds.	Total.
Griffiths & McDermott Construction Co., Chicago	$14,200	$2.00	$4.60	$3.60	$3.60	$3.00	$69,335
Jonathan Clark & Sons Co., Chicago	17,400	1.40	4.20	4.20	4.20	4.20	67,034
Benezette Williams & Co., Chicago	11,320	1.25	5.00	5.00	5.00	5.00	67,795
Campbell & Brown, Chicago	18,200	1.65	4.81	5.06	4.87	5.28	78,357
Christie & Lowe, Chicago	18,767	2.00	5.40	5.40	5.40	5.40	83,837

SEWERS.—Jamaica, N. Y.—The contract for constructing sewers, as advertised in Engineering News, has been awarded to James F. Gillen, at $129,806, the bids being as follows; Engr., John J. McLaughlin:

Bids Received April 19 for Constructing a Sewer System at Jamaica, N. Y.

Bidder.	26×39-in. brick, 7,000 lin.ft.	24-in., 6,550 lin.ft.	18-in., 1,650 lin.ft.	15-in., 7,475 lin.ft.	Pipe, 12-in., 22,300 lin.ft.	10-in., 19,700 lin.ft.	8-in., 84,600 lin.ft.	6-in., 2,000 lin.ft.	Manholes, 420.	Planking, 20,000 ft.	Total.
Herbert Tate, New York	$5.44	$3.72*	$1.83*	$1.55*	$1.28*	$1.18*	$0.91*	$0.23	$37.50	$0.015	$222,338*
" " " "	....	3.32	1.51	1.20	1.07	.80	.80	...	.....	...	195,099
Frank W. McNeal, Brooklyn	4.69	3.17*	1.88*	1.68*	1.21*	.78	.685	.22	36.87	.018	185,839*
" " " "	....	....	....	....	.995	...	...	...	....	...	181,044
J. Long & M. Little, New York	4.50	2.60	1.50	1.40	1.00	.80	.70	.35	50.00	.02	180,850
J. J. Maloney, Brooklyn	3.85	2.70	1.60	1.25	.90*	.69	.57	.25	35.00	.02	154,104*
" " " "	....	....	....	....	.85	...	...	...	.....	...	152,989
Daniel J. Creen, Brooklyn	3.50	1.90	1.75	1.25	.80	.70	.60	.50	28.00	.03	145,516
Clapp & Gorman, Hempstead	3.75	2.50*	1.40*	1.25*	.82*	.57	.47	.18*	36.00	.03	139,636*
" " " "	....	....	....	....	.70	...	...	...	.....	...	136,960
Jas. F. Gillen, Brooklyn	3.45	2.00	1.60	1.20	.71	.51	.51	.51	25.00	.02	129,806

* For cement pipe.

INDUSTRIAL NOTES.

THE CONTINENTAL ASPHALT CO. has had Mr. John L. Galt, Ardmore, Ind. Ter., appointed receiver.

THE BARNARD BRICK CO., Bellaire, O., has made an assignment. The plant is said to have cost about $32,000.

THE SALEM IRON CO. has had Mr. M. J. Childs, Lisbon, O., appointed receiver; liabilities reported at $200,000.

THE HECLA POWDER CO., New York, announces that its offices will be removed about May 1 to 96 Liberty St.

THE McKIERNAN DRILL CO., New York, has removed its offices from 126 Liberty St., to larger rooms at 120 Liberty St.

JONES & M'LAUGHLINS, Pittsburg, Pa., have the contract for 1,500 tons of steel for the new court house at Detroit, Mich.

THE McCOY BRICK & TILE CO., Augusta, Ga., is making extensive additions to its plant. Mr. W. E. McCoy is president and treasurer.

THE MORGAN ENGINEERING CO., Alliance, O., has a contract for three electric traveling cranes of 10 tons capacity each for Jones & McLaughlins, Pittsburg; one will have a span of 80 ft., the other two of 40 ft.

THE MADISON CAR WORKS, Madison, Ill., will soon be sold under decree of foreclosure, according to a press report. The plant is said to be valued at $800,000, and has been idle for some time.

PINKERTON & MULL., Green Island (Troy), N. Y., have just received the contract for two 150-HP. boilers for the Fort Edward Paper Co. They are now building a 150-HP. boiler for J. N. S. Barnett & Son, of Little Falls.

THE MONTREAL PIPE FOUNDRY CO., LTD., Canada Life Bldg., Montreal, is the new name of the Drummond-McCall Pipe Foundry Co., Ltd. Pres., Thos. J. Drummond; Vice-Pres., C. Ed. Gudewill; Secy.-Treas., J. T. McCall.

THE GRANT PAVING CO. is the new name of the Grant Asphalt Paving & Slagolithic Co., Bee Building, Omaha, Neb. The capital stock has been increased to $75,000. Pres., W. H. Alexander; Vice-Pres., Guy C. Barton; Secy. and Treas., E. W. Nash; Supt., John Grant.

THE CANADIAN BRIDGE & IRON CO., Montreal, Que., has just comleted a steel bridge to be erected on the Canadian Pacific Ry. in British Columbia, and one for the Intercolonial Ry. in Nova Scotia. Mr. A. Davis, recently superintendent of water-works, Montreal, is now general manager of the company.

THE FELT & TARRANT CO., of Chicago, Ill., has had its comptometer adopted for use in the computing engineer's office of the United States Navy. Mr. Felt states that 11 of them are now in use in Washington, D. C., and that this department has already purchased 27. He also advises that some of the bridge companies are using them, having recently received an order for one from the Youngstown Bridge Co., of Youngstown, O.

THE NITRO-POWDER CO., Kingston, N. Y., has the contract to supply the Lawrence Cement Co., of New York city, with all powder used in their extensive cement rock mines in Ulster Co., New York, during the coming year. This cement was chosen upon a competitive test made in the Lawrence Cement Co.'s mines at Binnewater, N. Y.

THE BALDWIN LOCOMOTIVE WORKS, Philadelphia, Pa., has added to its plant a new boiler shop, having a frontage of 345 ft. on Buttonwood St., 200 ft. on Hamilton St., and 180 ft. on 15th St. The main building is two stories high, but the part fronting on Hamilton St. is carried up to a third story.

THE SLOSS IRON & STEEL CO., Birmingham, Ala., elected the following directors at its annual meeting April 27: E. W. Rucker and Soloman Haas, Birmingham; Joseph Bryan and E. D. Christian, Richmond; J. C. Maben, W. H. Goadby, W. E. Strong, Henry Mortimer, and John A. Rutherford, New York. Mr. Mortimer is the only new man.

THE RICE, BARTON & FALES MACHINE CO., Worcester, Mass., has just completed for the Rumford Falls Paper Co., Rumford Falls, Me., a paper machine which will make, according to the reports, paper 15 ins. wider than any other machine in this country and 2 ins. wider than any other in the world, turning out 35 tons of finished paper a day. It is 175 ft. long and 26 ft. wide.

THE SIOUX CITY SEWER PIPE CO., Sioux City, Ia., has had Mr. E. D. Wigton appointed receiver. The company was organized in 1890 as the Northwestern Sewer Pipe & Tile Co., and has a paid-up capital stock of $58,700. Mr. W. E. Carter, Pres., is quoted as stating that work will be continued at the plant and a large force of men be given employment at once in the manufacture of paving brick.

THE AMERICAN HOIST & DERRICK CO., St. Paul, Minn., through its New York branch office, has closed a contract for a considerable quantity of hoisting machinery, including hoisting engines, four derricks, etc., to be used in erecting the steel office building for Mitsuf & Co., at Tokio, Japan. This building was designed by Mr. Tamisuke Yokokawa, of Japan, and will be 150 × 235 ft. in size. The contract for the steel work has been awarded to the Carnegie Steel Co., of Pittsburg, as noted in these columns April 15.

THE UNION CENTRAL SEWER PIPE CO. has been organized at Cleveland, O., according to a press report, which states that the new company includes four-fifths of the entire sewer pipe interests in the United States. It is claimed that the prices will not be raised. Directors: J. W. Cooper, Chairman, Uhrichsville, O.; B. W. Robinson, Secretary, Akron, O.; Chas. O'Connor, Lock Haven, Pa.; Alfred Lyth, Buffalo, N. Y.; David E. Hill, Akron; F. N. Koudolf, Rochester, N. Y.; W. N. Goucher, Toronto, O.; H. A. Robinson, Barberton, O., and E. H. Gibbs, Akron, O.

THE BELOIT IRON WORKS, Beloit, Wis., is reported to have recently shipped to Japan a paper-making machine for the Yok Kaichi Paper Co., of Yok Kaichi Ise, Japan, and to be used in the print paper trade with Australia. The shipment is said to have required 11 cars and to have included a 60-ft. wire-covered bottom press, twenty 48-in. drivers of 96-in. face, four 36in. drivers of the same face, one 24-in. overhang drier, a 10-roll stack of callenders, two stacks upright reels and a slipping machine and winded designed for the finishing room. The machine has a speed of from 250 to 450 ft. a minute. Its length is 130 ft.

THE L. SCHREIBER & SONS CO., Cincinnati, received the following contracts during the last month: For the John Hauck Brewing Co., a fireproof malt house, replacing one recently destroyed by fire, $15,000. Designed and secured contract for the buildings for a sugar plant at New Orleans, La., consisting of boiler-house, mill house, cane shed, steel construction with latest improvements, for Jas. Laws & Co., of Cincinnati, $25,000. Contract for a building in Cincinnati, 200 ft. front, 7 stories high, all iron front with interior column and girder construction, $18,000. Also roof for custom house building at Youngstown, O., $5,000, and a considerable number of smaller contracts.

THE BERLIN IRON BRIDGE CO., East Berlin, Conn., has the contract for furnishing for the government of Limon, Costa Rica, a market building constructed entirely of steel. The framework of the building will be of light skeleton steel work. The roof covering will be galvanized iron, with ornamental cresting and cornices. This building is constructed in the form of a quadrangle 120 ft. square. The interior court is 40 ft square, in the center of which will be placed a fountain. Each side of this quadrangle will be 40 ft. wide. Completely surrounding the building will be placed an ornamental iron fence provided with large entrance gates.——The company also has the contract for the steel work for a boiler shop 300 × 105 ft. to be erected at Bayonne, N. J., by the Standard Oil Co. The main portion of the shop is divided into three bays. The central bay, about 50 ft. wide, is served with a 15-ton electric crane supported on heavy girders about 40 ft. above the floor. On either side of this main portion is a wing about 30 ft. wide. The walls of the building are brick and the supporting frame work is steel. The roofs are to be covered with corrugated iron. The main columns of the shop are 25 ft. apart and all arranged so that jib cranes of suitable size and capacity can be attached at any point, which together with the traveling crane in the center will enable them to cover the entire floor surface of the building. One end of the building for a distance about 75 ft. in length is supported by clear span trusses, which gives a clear floor space over this entire area. In this end of the building will be located fires and furnaces, and other apparatus for heating and shaping the material for the boilers. The building is well lighted by windows in the sides of the brick walls and in the monitors of the roof, and is amply ventilated by means of large monitors on the ridge.

NEW COMPANIES.—Boston Electroduct Co., Versailles, Pa.; $12,000, commencing with $1,200; to manufacture and sell electrical specialties and supplies; Treas., A. Chandon, McKeesport, Pa.

United States Long Distance Telephone & Telegraph Co., chartered in W. Va.; $5,000,000, commencing with $1,000; to manufacture telephone instruments and machinery, and to operate a telephone and telegraph line; James Russell, W. J. McBriety, W. J. Atkinson, and J. M. Welch; S. E. Feddeman, Centreville, Md.

Fefel Multiplier Machine & Power Co., New York; $1,000,000, commencing with $1,000; to manufacture and sell all kinds of machinery; James Niblo, Brooklyn; W. B. Burnet, J. C. Ritchie, H. H. Fefel and J. A. Simmons.

Mannesmann Cycle Tube Works, Jersey City, N. J.; $2,000,000, commencing with $1,000; for the daming of rivers and streams, and the storage, transportation and sale of water and water power, etc.; R. Mannesmann, Adams, Mass.; Howard H. Williams, New York, N. Y.; Kent K. Stearns, Jersey City.

Arizona Onyx Co., Jersey City, N. J.; $1,000,000, commencing with $1,000; to quarry, purchase and sell marble, onyx, etc.; Wm. P. Stevenson and Wm. T. West, Roselle, N. J.; Wm. M. Paxton, Jr., Princeton, N. J.

Hunter Illuminated Gas Sign Co., Huntington, W. Va.; commencing with $250,000; to manufacture and sell street cars, and to do a general manufacturing business; J. H. Hunter, Indianapolis, Ind.; E. F. Wickham, St. Louis, Mo.; O. J. Carpenter and C. J. Brinhers, Covington, Ky.

International Transportation Bureau, Limited, Jersey City, N. J.; $100,000, commencing with $1,600, for the building, equiping, maintaining and operating of railroads; A. MacGregor Leffingwell, New York, N. Y.; O. W. Buckley, Philadelphia, Pa.; Chas. N. King, Jersey City, N. J.

Beverly Construction Co., Beverly, N. J.; $100,000, commencing with $1,000; to construct and equip railroads, railways and trolley roads, also bridges, gas and water-works; Samuel F. Houseman and Henry V. Massey, Philadelphia, Pa.; M. B. Parkins, Beverly.

Mead & Shaw Mfg. Co., Jersey City, N. J.; $100,000, commencing with $75,000; to manufacture and sell Mead's safety steam generators, safety boilers, etc.; A. F. Mead, 282 9th Ave.; H. W. Shaw, 106 West 56th St., and E. H. Mead, 125 West 106th St., New York, N. Y.; and Abraham L. Graham, 108 York St., Jersey City.

The London Company, Charleston, W. Va.; $300,000, commencing with $40,000; to mine coal, iron ore, etc., and to bore for oil and natural gas; W. A. MacCorkle, Neil Robinson, Chas. K. McDermott and M. M. Williamson, Charleston; H. A. Holt, Lewisburgh, W. Va.

Andrews-Griffith Co., Pittsburg, Pa.; $1,000; to manufacture iron and steel; Treas., E. E. Andrews, McKeesport, Pa.

Ohio Safety Elevator Co., Cleveland, O.; $500,000; to manufacture elevator safety appliances and hoisting machinery; Hugo Mattullath, H. H. Rees, Edwin C. Thurston, Albert H. Bates and Edward B. Gilchrist.

Montauk Gas Fixture Co., Brooklyn, N. Y.; $50,000; W. H. Boyer and H. A. Schmidt, New York; H. M. Birkett and W. M. Raynor, Brooklyn.

Alfred Telephone & Telegraph Co., Alfred, N. Y.; $2,000; to maintain a telephone line from Alfred to Hornellsville; Calvin D. Reynolds, D. Sherman Burdick, William H. Crandall and Charles T. Harris.

Red River, Taos & Santa Fe Telephone Co., Santa Fe, N. M.; $50,000; Delos Durfee, Colorado Springs, Colo.; John H. Denny, William R. Rynerson and Henry C. Brailry, Red River, O.; and Frank Staplin, La Belle, N. M.

Composite Type Bar Co., incorporated in New Jersey; $10,000,000; to manufacture machinery, etc., for use in the printing trade; John Carneck and Charles S. Kellogg, New York; Ernest Marks, George A. Kay and Lucien A. Brott, Brooklyn, N. Y.

National Electro-Galvanizing Co., New York, N. Y.; $240,000; Edmann N. Brandt, Will G. Hay and Edward A. Owen, New York; Horace H. Thayer, Yonkers, N. Y.; Theodore L. Potthoff, Long Island City, N. Y.

Express Refrigerator Car Co., Gainesville, Fla.; $50,000; to manufacture refrigerator cars patented by A. J. McArthur; Pres., A. S. Wooley; Vice-Pres., Marcus Endel.

Thomas Elevator Co., New York, N. Y.; $22,000; George S. Dase, New York; Emmet A. Thomas and Chas Thomas, Chicago, Ill.; Arthur A. Mitchell, West Brighton (S. I.), N. Y.

Candelaria Gold & Silver Mining Co., New York, N. Y.; $500,000; to operate in the mining district of San Dimas, State of Durango, Mexico; Mark Birmingham, Joseph Hoyer and Chas. A. Reed, New York, N. Y.

Brecht Ice Machine & Engineering Co., St. Louis, Mo.; $90,000, commencing with $10,000; Gus. A. V. Brecht, W. Johnson, J. Walker Siesla, E. W. Volkening and Francis Carl.

Nebergall Drilling Co., Omaha, Neb.; $10,000; to bore artesian wells, or prospect for coal or other ores; L. E. and E. M. Nebergall and August Doll.

New England Cement & Stain Mfg. Co., New Haven, Conn.; $7,500; William O. Hadley, George H. Cook, Christopher A. McLaughlin, George B. Chadwick.

Sewer Inlet

Acknowledged the simplest and most practical Sewer Inlet made.

Steel Screw Sewer Jacks, with Swivel Head.

Street and Sewer Castings made any style. Send blue prints for estimates.

Manhole.

THE SOUTH BEND FOUNDRY CO., South Bend, Ind.

KALAMAZOO FOUNDRY AND MACHINE CO., Kalamazoo, Mich.

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THE ONLY BRACE MADE WITH STEEL SCREW.

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HOUSEHOLD GARBAGE CARBONIZER, for the Disposal of Domestic Waste.
PORTABLE GARBAGE FURNACES, for Hotels, etc.
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Works on either standing Timber or Stumps.

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For showing Transverse strength of Foundry Test Bars.

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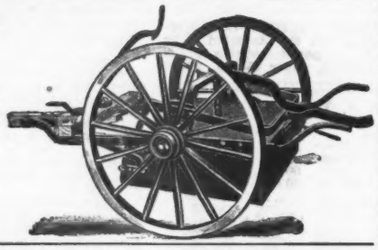
The most practical and durable Scrapers made.

Write for our 56-page illustrated catalogue. It describes them as well as our Drag Scrapers, Plows, Dump Cars, Dump Wagons, Road Graders Wheel Barrows, Elevating Grader, Ditch and Wagon Loader.



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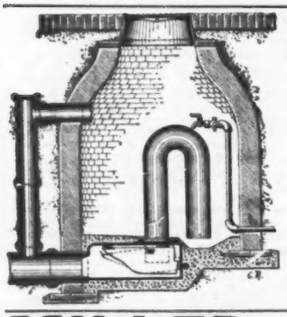

THE VAN VRANKEN AUTOMATIC SEWER FLUSH TANK

Will discharge with the smallest feed stream of any tank in the market. Does not require excavation below the bottom of the sewer; can be used where the depth of sewer is but two and one-half feet.

For catalogues, discounts and other particulars, address

J. LELAND FITZGERALD, SCHENECTADY, NEW YORK.

J. N. Du Barry, Jr., & Co.

Harrison Building, Philadelphia, Pa.

RAILWAY SUPPLIES, CONTRACTORS' SUPPLIES, CEMENTS.

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CEMENTS, BUILDERS' MATERIALS, HARDWOOD and SLATE MANTELS, SEWER PIPE.

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RHENISH WESTPHALIAN EXPLOSIVES COMPANY, LIMd. COLOGNE

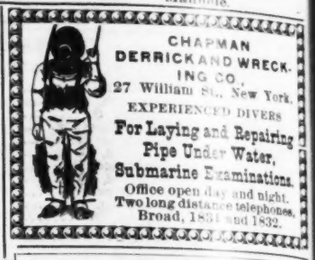
FR. SCHROEDER, Sole Agent for the U. S. A., 66 Maiden Lane New York.

FLEXIBLE JOINTS

FOR WATER PIPES, FOR GAS, OIL, COMPRESSED AIR, ETC.

Strongest, Cheapest, Easiest to Use.
Contracts taken for Submerged Pipe Laying.
Correspondence Solicited.

A. L. HOLMES, Grand Rapids, Mich.



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EXPERIENCED DIVERS
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Office open day and night. Two long distance telephones, Broad, 1831 and 1832.

RIFE HYDRAULIC ENGINE

Pumps Water by Water Power.

TOWN, RAILROAD, BOILER, IRRIGATION

WATER SUPPLY.

Cost Installment—LOW.
Cost Maintenance—TRIFLING.
Cost Operation—NOTHING.

POWER SPECIALTY CO.
126 Liberty St., N. Y.

Commonwealth of Massachusetts.

METROPOLITAN WATER BOARD.

LAYING WATER PIPES.

Sealed proposals will be received at the office of the Metropolitan Water Board, 3 Mt. Vernon Street, Boston, Mass., until 2:30 o'clock, p. m., of Tuesday, May 4, 1897, for laying about 11,000 ft. of 36-in. cast-iron water pipes in Malden, Melrose and Stoneham.

The greater part of this work is to be done in the Middlesex Fells Reservation, and the contract will include about 4,000 cubic yards of rock excavation.

Pamphlets containing further information for bidders, forms of proposal, contract and specifications, will be mailed to contractors who apply to the Chief Engineer, or may be obtained at his office, 3 Mt. Vernon Street, and plans may be seen at his office. The printed forms must be used in making proposals. The Board reserves the right to reject any or all proposals, or to accept the proposal deemed best for the Commonwealth.

HENRY H. SPRAGUE, Chairman,
WILMOT R. EVANS,
HENRY P. WALCOTT,
Metropolitan Water Board.
FREDERIC P. STEARNS, Chief Engineer.
WILLIAM N. DAVENPORT, Secretary.
Boston, April 20, 1897. 16-2t

ELECTRIC LIGHTING.

CLERK'S DEPARTMENT, CITY OF MOBILE, ALA.

Plans, Specifications and Sealed Bids addressed to the Hon. Harry T. Inge, Chairman of the Street Committee of the City of Mobile, Alabama, for lighting the city, will be received until May 15th, 1897, at which date they will be publicly opened.

Proposals must be for a term of five years, beginning Nov. 1st, 1897, for Two Hundred (200) Arc Lights of 2,000 candle-power each, direct current, to be lighted every night from sunset until sunrise.

A certified check for One Thousand Dollars ($1,000.00) as a guarantee of the faithful performance of contract must accompany each bid, which sum of $1,000.00 shall be forfeited to the City of Mobile in the event of failure to furnish by the party or parties awarded the contract a good and sufficient bond in the sum of Ten Thousand Dollars within ten days from the awarding of said contract.

The city reserves the right to reject any or all bids.

For specifications address

HARRY T. INGE, Chairman of Street Committee, Mobile, Ala.

16-2t

U. S. ENGINEER OFFICE, Telephone Building, Detroit, Mich., April 17, 1897.—Sealed proposals for DREDGING Black River at Port Huron, Mich.; Bar at mouth of Black River, Mich.; Belle River, at Marine City, Mich.; and Clinton River, Mich., will be received here until 12 o'clock noon (standard time), May 7, 1897, and then publicly opened. Apply here for information. G. J. LYDECKER, Lt.-Col., Engrs. 16-2t

For Other Proposals see Page XXII.

MILLER AUTOMATIC SIPHON

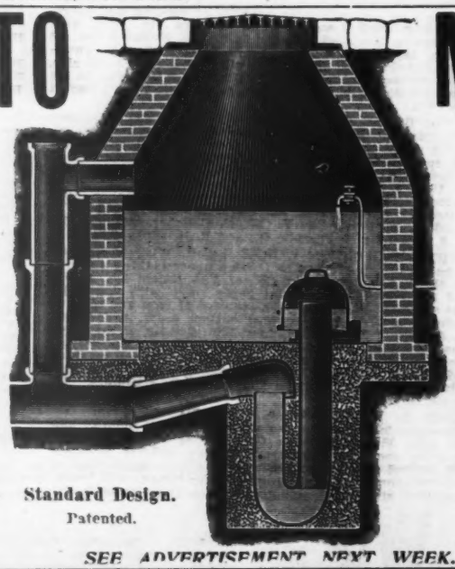
—FOR—

Intermittent Flush Tanks.

SIMPLEST SIPHON MADE.

No Moving Parts;
No Valves;
No Small Tubes to clog or choke.

WE GUARANTEE EVERY SIPHON TO BE ABSOLUTELY RELIABLE—NO MATTER HOW SMALL THE STREAM MAY BE.



Standard Design. Patented.

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Flushing Street Sewers and for Sub-Soil Irrigation.

Most Reliable Siphon Made.

Received Highest Award at World's Columbian Exposition, 1893 for SIMPLICITY OF CONSTRUCTION, EFFICIENCY and RELIABILITY.

MANUFACTURED BY

Pacific Flush Tank Co.

84 LA SALLE STREET, CHICAGO.

WRITE FOR CATALOGUE AND PRICES.

SEE ADVERTISEMENT NEXT WEEK.

Chas. H. Strong & Sons Co., Cleveland, O.; $50,000; to construct and repair public and private works of all kinds; Charles H. Strong and Harry B. Strong.

Machinery Exchange, Chicago, Ill.; $10,000; to deal in machinery; A. J. Kirkland, W. A. Rice and W. D. Sherwood.

Virginia Equipment & Construction Co., incorporated in Virginia; $10,000; Pres., Charles Adamson, Cedartown, Ga.; Vice-Pres., Griffin C. Callihan; Secy. and Treas., W. E. Stokes, Philadelphia, Pa.

Duluth Dredge & Dock Co., Duluth, Minn.; $50,000; Pres., Robert Smith; Vice-Pres., Frank McCormack; Secy. and Treas., William Clifford; B. J. Cook and James A. Hanks.

Citizens' Telegraph & Telephone Co., Newport News, Va.; Pres., M. B. Crowell, Norfolk; Vice-Pres., Charles E. Fink, Westminster, Md.; Secy., W. S. Boyenton, Newport News.

Rex Cycle Co., Chicago, Ill.; $225,000, commencing with $1,000; to manufacture and sell cycles and to manufacture iron, steel, etc.; R. B. Oellers, W. H. Whithall, J. C. McNaughton, L. A. Conwell and W. T. Brownridge.

Keystone Paving Co., Scranton, Pa.; $30,000, commencing with $3,000; to make paving, etc.; Treas., M. H. Dale, Scranton, Pa.

People's Telephone Co., Allentown, Pa.; $25,000, commencing with $2,500; to operate a telephone line; Treas., John Mustaid, 249 East Logan Sq., Philadelphia, Pa.

Lara & Falcon Development Co., Lopez, Pa.; $3,000,000, commencing with $10,000; to manufacture all kinds of lumber, etc.; C. H. Jennings, B. W. Jennings, of Lopez; G. W. Upton, E. L. Sabin and F. M. Sabin, Warren, O.

Heyderband Incandescent Light Co., New York, N. Y.; $2,000,000, commencing with $150; to manufacture gas fixtures, etc.; F. P. Ward, Charles Haldene, H. J. Brockmeyer and E. T. Heyn, New York; G. B. Covington, Brooklyn, N. Y.

Locuyo Navigation Co., Lopez, Pa.; $3,000,000, commencing with $10,000; to lease passenger and freight boats and to rent buildings for foundries, etc.; C. H. Jennings, B. W. Jennings, Lopez; G. W. Upton, E. L. Sabin and F. M. Sabin, Warren.

Cambridge Springs Electric, Telephone & Telegraph Co., Cambridge Springs, Pa.; $10,000, commencing with $1,000; to construct and maintain telegraph lines, etc.; Treas., D. O. Kelley, Millers Station, Pa.

Keystone Separating Co., Beaver Falls, Pa.; $4,000, commencing with $400; to manufacture iron and steel; Treas., Lyle S. Lutton.

Boll & Shaar Mfg. Co., Steelton, Pa.; $1,000; to manufacture iron and steel; Treas., Jacob Shaar.

Braeburn Steel Co., Braeburn, Pa.; $200,000, commencing with $20,000; to manufacture iron and steel; William Metcalf, D. W. Dunbury, Charles Metcalf and Robt. P. Kelly, Pittsburg, Pa.

Watson & McDaniel Co., Philadelphia, Pa.; $30,000, commencing with $3,000; to manufacture and sell steam pipes, valves, etc.; Treas., James Watson, 1623 Mount Vernon St.

Castalia Portland Cement Co., Pittsburg, Pa.; $150,000, commencing with $15,000; to manufacture cement, etc.; Treas., George J. Gorman.

Equitable Heating Co., Pittsburg, Pa.; $1,000; to manufacture and supply gas in this city; Treas., William H. Aldred.

Lay System of Hydraulic Placer Mining Co., New York, N. Y.; $1,000,000, commencing with $500; to manufacture and sell machinery; W. F. Lay, O. A. Morse, E. P. Brown, O. D. Hall and Herbert Tweddle.

Chemical Copper Mining & Smelting Co., St. Louis, Mo.; $3,000,000, commencing with $100,000; to buy and operate mines, etc.; Philip Seibel, John Boepple, C. C. Higham, C. H. Meyer and Henry Goetz.

World Mfg. Co., incorporated in New York; to manufacture and sell all kinds of electrical instruments; E. J., T. E. and W. P. Harrison, H. F. Gray and L. G. Addison.

Continental Water-Works Co., Trenton, N. J.; $100,000, commencing with $10,000; to operate water-works, gas and electric works; S. F. Potter, Greensburg, Pa.; C. W. Knight, Rome, N. Y.; A. C. Overholt, Scottdale, Pa.; J. H. Wright, Trenton, N. J.

Glenn Falls Coal & Coke Co., Charksburg, W. Va.; $2,000,000, commencing with $1,000; to mine coal, etc.; C. A. Barron, Enich and A. M. Jones, Shamokin, Pa.; J. T. Jones, Clarksburg.

Central Union Sewer Pipe Co., Cleveland, O.; $25,000; Henry Thompson, David E. Hill, Charles F. Chapman, Alex. H. Commins and John W. Chapman.

American Stone Conduit Co., Chicago, Ill.; $100,000; Robert W. Francis, Frank E. Mariner, D. A. Kimbark and E. N. Reaser.

Air-Lighter Co., New York, N. Y.; $800,000, commencing with $500,000; to manufacture gas tips or burners; Gustav L. Jaeger, Maywood, N. J.; Frederick Folz, G. Osgood Andrews, New York, N. Y.; Wilson P. Marchbank, Newark, N. J.

Barr-Fyke Machine Co., Kansas City, Mo.; $50,000; J. H. Barr, Ed. E. Yates, M. A. and C. O. Fyke.

Duluth Dredge & Dock Co., Duluth, Minn.; $50,000, commencing with $10,000; to engage in a general dredging and dock building business; Frank McCormack, Barnett J. Cook, Wm. Clifford, Jas. A. Hanks and Robert Smith.

Natchez Telephone Co., Natchez, Miss.; $25,000, commencing with $6,000; to operate a telephone line in this city; A. G. Campbell, W. P. Stewart, J. A. Clinton, Joseph Reale and G. F. Greene.

Pan Telephone Co., Fort Smith, Ark.; $15,000, commencing with $9,000; L. E. Ingalls, W. H. H. Clayton and James Brizzolara.

New England Building Material Mfg. Co., Jersey City, N. J.; $100,000, commencing with $61,000; to manufacture building materials; John H. Hensley and J. M. Staveley, Boston, Mass.; Chas. S. Stearns, Hartford, Conn.

Kato Mfg. Co., Jersey City, N. J.; $100,000, commencing with $100,000; to manufacture gas fixtures, metal goods, etc.; George P., George P., Jr., and Frederick Kato, 236 Baldwin Ave., Jersey City, N. J.

United States Investment Co., Camden, N. J.; $100,000; commencing with $100,000; to construct and repair water, gas and electric light works, etc.; Jasper R. Rand, T. Wilcox Stephens and Benj. Strong, Montclair, N. J.

Randsburg & Kramer Telegraph & Telephone Co.; $5,000; to construct a line between Randsburg and Kramer, a distance of 28 miles; Ben Goodman, L. E. Goodfellow, John Denan, B. F. Vreeland and R. W. Kenny.

Utica Telephone Co., Utica, N. Y.; $100,000; William Clark, Fort Plain; William Clober, Jr., Utica; Elmer E. Summey, Buffalo; George McClumpha, Amsterdam; Hon. Isaac J. Evans, Rome; Charles W. Mather and Boardman L. Fitch, Utica.

Southern Telephone Co., Dublin, Ga.; $9,000; to maintain a system between this place and Tennille; Pres., William Pritchett.

Greater New York Telegraphic Call Co., New York, N. Y.; $5,000; to maintain a telegraphic call system in this city; Jacob Fleischhauer, Allen Julius Fleischhauer, Charles K. Lexow, John Keenan and James Heffernan, New York.

Marks Enclosed Arc Light Co., New York, N. Y.; $10,000; Marcus W. Marks, Frederick W. Marks and Louis B. Marks, New York.

D. & W. Fuse Co., Providence, R. I.; $50,000; to manufacture and sell electrical fuses, wire, etc.; Louis W. Downes, William C. Woodward, Lewis T. Downes and David C. Moulton.

Aransas Mfg. & Construction Co., Aransas Pass, Tex.; $16,000; J. H. Hoffman, W. F. McMullen, C. F. Black and others.

Rochester Water Co., Portland, Me.; $100,000, commencing with $300; to manufacture machinery for water-works, etc.; Pres., James C. Fox; Treas.; Harry M. Verrill.

West End Brick Co., Allentown, Pa.; $5,000; John Bowen, Harry C. Trexler, James K. Bowen, John J. Yingling and Frank M. Trexler.

Sanger Mill & Elevator Co., Sanger, Mo.; $25,000; A. D. Miller, J. C. Rice, A. J. Nance, A. M. Wilson, J. B. Sullivan, G. M. Kirby and others.

Rome Telephone Co., Rome, N. Y.; $20,000; to operate a telephone line in this city; William Clark, Fort Plain; George McClumpha, Amsterdam.

Ossining Home Telephone & Telegraph Co., Sing Sing, N. Y.; $25,000; Louis M. Simpson, New York, N. Y.; C. H. Atkinson, Jersey City, N. J.; E. L. Ryder, John McNally, Edward F. Sheehan and John Gibney, Sing Sing.

CHEMICAL ENGINE AND HOSE WAGON.

AMSTERDAM, N. Y

Bids will be received by the Common Council of the City of Amsterdam for the furnishing of a chemical engine and hose wagon combined; bids to be opened at a meeting of Council to be held on the evening of May 4th, 1897.

THOS. HAZLETT, City Clerk.

Amsterdam, N. Y., April 22d, 1897. 17-1t

STEEL HIGHWAY BRIDGE.

OFFICE COMMISSIONER OF PUBLIC WOKKS, CITY HALL, PROVIDENCE, R. I., Apr. 27, 1897.

Sealed proposals addressed to the Commissioner of Public Works, City Hall, Providence, R. I., will be received until eleven o'clock a. m., May 15, 1897, for furnishing a steel highway bridge over the Providence River, to replace the present Weybosset bridge.

Plans and specifications may be seen at the City Engineer's office, City Hall, where blank forms of contract, proposal and bonds may be obtained.

Each proposal must be accompanied by a bond or certified check for two thousand dollars.

The right to reject any or all bids is reserved.

ROBERT E. SMITH,
17-3t Commissioner of Public Works.

MACADAMIZING.

ARVERNE-BY-THE-SEA, N. Y.

Sealed bids or estimates will be received by the Board of Trustees of the Village of Arverne-by-the-Sea, Queens County, N. Y., at a meeting to be held at the office of the Village Clerk in said village on the 8th day of May, 1897, at 3 o'clock p. m., for regulating, macadamizing and otherwise improving certain streets and avenues in said village, in accordance with plans and specifications on file in the office of E. W. Conklin & Sons, Civil Engineers, Far Rockaway, N. Y.

No bids will be received or considered unless accompanied by a certified check to the amount of Five Hundred (500) Dollars.

The right is reserved by the Board of Trustees to reject any or all of the bids.

By order of the Board of Trustees,

JOHN R. WATERS, President.
A. E. KARELSEN, Clerk. 17-1t

ASPHALT PAVING.

PEORIA, ILL.

Sealed bids will be received by the Commissioner of Public Works of the City of Peoria, Illinois, until 2 o'clock p. m. of Thursday, May 6, 1897, for furnishing all labor and material for the construction of about 4,000 square yards of asphalt pavement and about 2,600 lineal feet of cement curb and gutter on Bigelow Street, in said city, according to the specifications on file in the office of the Department of Public Works.

Proposals must be made out upon blanks furnished by said Department and be accompanied with One Thousand Dollars ($1,000.00) in money, or certified check for same amount on some responsible bank doing business in the City of Peoria.

For specifications, blank forms of proposal, and any information, address the City Engineer.

WILL. O. CLARK,
Commissioner of Public Works.
A. D. THOMPSON,
City Engineer. 17-1t

SEWERS.

PELHAM MANOR, N. Y.

PUBLIC NOTICE IS HEREBY GIVEN by the Board of Sewer Commissioners of the Village of Pelham Manor, Westchester County, N. Y., viz.—

Sealed proposals will be received for furnishing and laying in the MAIN SEWER SYSTEM of the Village of Pelham Manor, N. Y., as follows:

About	20,000	feet	8-inch	Vitrified	Pipe.
"	500	"	10 "	"	"
"	2,800	"	12 "	"	"
"	3,100	"	15 "	"	"
"	2,000	"	24 "	"	"

59 Manholes.
21 Lamp Holes.
13 Flush Tanks.

IN BAY SECTION:
About 8,000 feet 8-inch Vitrified Pipe.
17 Manholes.
8 Lamp Holes.
7 Flush Tanks.

IN PROSPECT HILL SECTION:
About 3,600 feet 8-inch Vitrified Pipe.
" 500 " 12 " " "
15 Manholes.
5 Flush Tanks.

Rock Excavation, per cubic yard.
Concrete, per cubic foot.

Each proposal must be accompanied by a certified check for $1,500 for Main Section, and $500 each on the other Sections as a guarantee of good faith. Said check will be forfeited to the village in case the party submitting such proposal shall refuse to enter into a contract in accordance therewith within five days in case such proposal shall be accepted. After the execution of contract the check of successful bidder will be returned. All checks of unsuccessful bidders will be returned as soon as contract is awarded.

The successful contractor will be required to give a bond of not less than $10,000 on the Main System and $2,500 on each of the other two systems or sections, with sufficient sureties (Surety Company preferred) to be approved by the Board, for the faithful performance of said contract, etc., as provided for in Section Six of said Chapter 375 of the Laws of 1889.

Specifications will be furnished and plans can be seen at the office of said Sewer Commission on or after May 3d, and until 4 o'clock p. m., Saturday, May 15th.

Sealed proposals must be received on or before 6 o'clock p. m., MONDAY, MAY 17th, and addressed to John C. Hazen, Clerk of the Board of Sewer Commissioners, Pelham Manor, N. Y.

Said Board reserves the right to reject any or all proposals.

F. CARLES MERRY, President.
JOHN C. HAZEN, Clerk.
DIEDRICH SCHMIDT,
HENRY B. B. STAPLER,
WILLIAM B. RANDALL,
17-3t Board of Sewer Commissioners.

U. S. ENGINEER OFFICE, 366 Milwaukee St., Milwaukee, Wis., April 5, 1897.—Sealed proposals for DREDGING 50,000 cubic yards, more or less, at Green Bay Harbor, Wis., in Fox River below DePere, will be received here until 12 o'clock noon, May 6, 1897, and then publicly opened. Information furnished on application. GEORGE A. ZINN, Capt., Engrs. 14-4t

TREASURY DEPARTMENT, Office Supervising Architect, Washington, D. C., April 26, 1897.—Sealed proposals will be received at this office until 2 o'clock p. m., on the 19th day of May, 1897, and opened immediately thereafter, for all the labor and materials and erecting complete an ELECTRIC PASSENGER ELEVATOR for the U. S. Court House and Post Office Building at TOPEKA, KAN., in accordance with drawing and specification, copies of which may be had at this office or the office of the Custodian at Topeka, Kansas. Each bid must be accompanied by a certified check for a sum not less than 2% of the amount of the proposal. The right is reserved to reject any or all bids and to waive any defect or informality in any bid, should it be deemed in the interest of the Government to do so. All proposals received after the time stated for opening will be returned to the bidders. WM. MARTIN AIKEN, Supervising Architect. 17-2t

ARCH BRIDGE.

WATERTOWN, N. N., April 23, 1897.

Sealed proposals wil be received at the office of the City Engineer, City of Watertown, New York, until Friday, the 7th day of May, at 5 o'clock p. m., for the construction of a bridge across the North branch of Black River at Mill Street. Bidders are requested to submit bids on three styles of bridges: first, Stone Arch; 2d, Concrete Arch; 3d, Steel Riveted Arch, dimensions of which are as follows: Length of Stone and Concrete arch, over all, 180 ft.; length of span, 140 ft.; width over all, 40 ft., which provides for roadway of 28 ft., and 2 sidewalks of 6-ft. each, less what is taken out for railing; steel arch to be 168 ft. between abutments; crown of arch to be not less than one-sixth of the span. Proposals to cover each style of construction erected complete, including abutments. Contract will not be awarded until after a special election, which is to be held May 10th, 1897. Each bid will be kept confidentially, and treated as though the City was ready to award contract for the erection. The intent of having bids submitted before election is to determine what amount it will be necessary to ask the tax-payers for this work. The lowest responsible bidder for the design of bridge accepted, will be awarded the contract under the same conditions that a contract would be awarded if the election was held prior to the opening of the bids. Each proposal must be accompanied with a certified check, made payable to the order of C. L. Paralee, City Chamberlain, in the sum of $2,000.00 for all bids for Stone or Concrete Arch, and $1,000.00 for Steel Arch construction. The checks are an evidence of good faith on the part of the bidder, and will be forfeited to the City of Watertown, in the event of the failure of any bidder to enter into the contract, if his bid should be accepted. All checks, excepting the check of the successful bidder, will be returned immediately after the contract is awarded.

The person or persons to whom the work is awarded will be required to execute the contract, and give a bond for the full amount of the same, for the faithful performance of the work; said bond and contract to be executed within 10 days from the date of the award. The City holds the right to reject any and all bids.

17-1t. J. B. WISE, Mayor.

U. S. ENGINEER OFFICE, 39 Whitehall St., New York, April 26, 1897.—Sealed proposals for DREDGING and ROCK EXCAVATION in East Chester Creek, N. Y., will be received here until 12 o'clock noon, May 26, 1897, and then publicly opened. Information furnished on application. H. M. ADAMS, Major, Engrs. 17-4t

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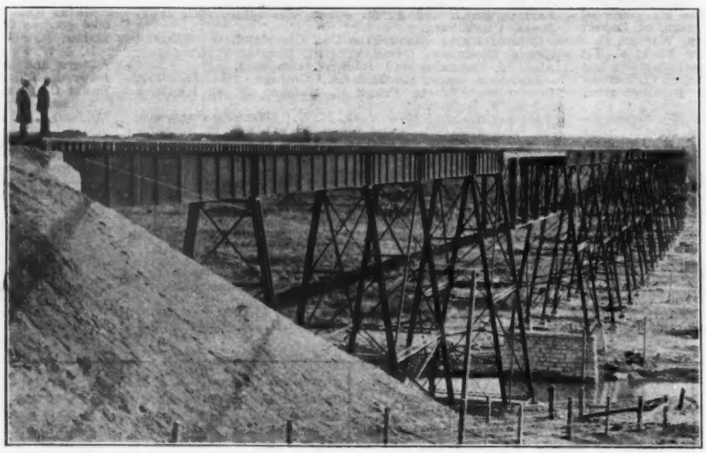

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Plants.

PERIODICAL EXAMINATIONS AND MAINTENANCE OF EXISTING STRUCTURES.

COUNTY COURT HOUSE.

GALVESTON, TEXAS.

Sealed proposals will be received at the office of N. J. CLAYTON & CO., ARCHITECTS, 22d and Strand, Galveston, Tex., until MONDAY, MAY 10TH, 1897, AT 12 M., for the construction and completion of the county court house for Galveston County, at Galveston, Tex., in accordance with the drawings and specifications of said N. J. Clayton & Co., architects.

The drawings and specifications can be seen in the office of said architects on and after MONDAY, APRIL 12, 1897, and any further information regarding the work can be obtained by calling on or addressing the architects.

A certified check in amount of $5,000, made payable to the order of the county judge of Galveston County, will be required from each person or firm submitting proposals, and the successful bidder or bidders will be required to give bond in amount of $50,000 for the faithful performance of the contract and to protect the county against any claims or liens from subcontractors for materials or labor furnished to the general contractor or contractors in the fulfillment of the contract.

All proposals submitted must be based upon the union scale of wages and the eight-hour working day for all workmen employed in the erection of the building.

All proposals are required to be submitted on blank forms, copies of which can be obtained from the architects, and copies of which, with copies of contract and bond forms, are attached to the specifications for the information of intending bidders.

The County Commissioners' court reserves the right to reject any or all proposals submitted. GEO. H. LAW, JR.,

Attest. Clerk County Court,
Galveston County, Texas.

By GEO. F. BURGESS, Deputy.

EXTENSION OF ELECTRIC SERVICE.

The electric service of the Baltimore & Ohio Railroad Belt Line, which has heretofore extended from the power-house, corner of Howard and Hamburg streets, to the Mount Royal Station Baltimore, has been completed to Waverly, a distance of 2 miles. Hereafter freight trains will be drawn to that point by the powerful electric locomotives. The object of the extension is to do away with the smoke nuisance in the Annex, and also to enable rapid transit over the heavy grades which lie between North Avenue and the York Road.

BRICK AND CHERT PAVING.

MERIDIAN, MISS., April 9, 1897.

Sealed proposals for paving streets in the city of Meridian, Miss., with vitrified brick, on concrete foundation, approximately 15,000 square yards, also proposals for paving with chert, approximately 30,000 square yards, addressed to I. A. Mooser, City Clerk, Meridian, Miss., will be received at the office of said City Clerk until 12 o'clock, noon, Friday, May 7, 1897. Specifications for each class of paving, including proposal blanks and all other necessary information may be had by application to undersigned Clerk or Mayor.

E. H. DIAL, Mayor.
I. A. MOOSER, City Clerk. 15-3t.

CAST IRON PIPE.

HATFIELD, MASS.

Proposals for cast-iron water pipes and special castings for the proposed extension of the Hatfield Water-Works at Hatfield, Mass., will be received by the Board of Water Commissioners of the Town of Hatfield, until noon of the 21st day of May, 1897.

Copies of the specifications may be obtained of the undersigned.

The right to reject any or all bids is reserved.

E. C. & E. E. DAVIS, Civil Engineer,
17-2t Northampton, Mass.

SUBWAY STATION.

NOTICE TO CONTRACTORS.—City of Boston.—Boston Transit Commission.—Sealed bids for building Section 7, Scollay square underground station of the subway, will be received at the office of the Commission, 20 Beacon street, Boston, Mass., till 12 O'clock m. of Wednesday, May 12, 1897. Each bid must be accompanied by a certified check for the sum of $2,500. Much of the work must be done at night. The structure will consist of a combination of steel and masonry. Some of the items are estimated to be as follows: 22,000 cubic yards earth excavation, 580 tons iron and steel, furnished by Commission, to be set in place; 5,000 cubic yards concrete and brick masonry. Plans can be seen and specifications and forms of contract can be obtained at 20 Beacon street, fifth floor. A bond will be required for the faithful performance of the contract in a sum of 20 per cent. of the amount. The Commission reserves the right to reject any and all bids and reserves the right to award the contract as it deems for the best interest of the City of Boston. GEORGE G. CROCKER, Chairman; CHARLES H. DALTON, THOMAS J. GARGAN, GEORGE F. SWAIN, HORACE G. ALLEN, Boston Transit Commission; HOWARD A. CARSON, Chief Engineer; B. LEIGHTON BEAL, Secretary. 16-3t

WATER-WORKS.

CHAMPLAIN, N. Y.

Sealed proposals will be received by the Board of Water Commissioners of the village of Champlain, N. Y., up to 7 o'clock p. m. of Friday, May 21st, 1897, for furnishing materials and for constructing a system of water-works for said village. There will be required, approximately, the following:

362 tons (5¼ miles) of cast-iron pipe.
30 Fire Hydrants,
18 Gate valves and boxes,
1 Stone pumping station,
1 Power pump of one million gallons capacity,
1 Water Wheel of 75 horse-power under 20 ft. head,
1 Penstock, 100 ft. by 5 ft. in diameter.

Bids will be received for furnishing any of the materials mentioned above or for constructing the water-works complete. A certified check equal to 2 per cent. of the bid must accompany each bid. Plans may be seen and specifications and blank forms of proposal may be procured at the office of the Secretary of the board at Champlain, N. Y. The right is reserved to reject any and all bids.

OLIVER ROBERTS, JR., President.
W. G. GRAVES, Secy. and Treasurer.
LOUIS BRASSARD,
SAMUEL PALMER,
Board of Water Commissioners.
Champlain, N. Y., April 28, 1897. 17-3t

PROPOSALS FOR CONSTRUCTING A HOT BLAST STEAM HEATING AND VENTILATING APPARATUS FOR WESTERN HIGH SCHOOL BUILDING, DISTRICT OF COLUMBIA.—Office of the Commissioners, D. C., Washington, D. C., April 22d, 1897.—Sealed proposals will be received at this office until 12 m., on May 1st, 1897, for constructing a Hot Blast Steam Heating and Ventilating Apparatus, Western High School Building, District of Columbia. Blank forms of proposals, together with all necessary information, can be obtained upon application therefor at the office of the Inspector of Buildings of the District of Columbia, and bids upon these forms only will be considered. The right is reserved to reject any or all bids. Proposals must be enclosed in an envelope, sealed, and endorsed on the outside "Proposal for constructing a Hot Blast Steam Heating and Ventilating Apparatus for Western High School Building." JOHN W. ROSS, GEORGE TRUESDELL, WM. M. BLACK, Commissioners, D. C. 17-1t

U. S. ENGINEER OFFICE, Oswego, N. Y., April 17, 1897.—Sealed proposals for building stone superstructure on part of BREAKWATER, at Burlington, Vt., will be received here until noon, May 17, 1897, and then publicly opened. Information furnished upon application. W. S. STANTON, Maj. Engrs. 16-4t

U. S. ENGINEER OFFICE, Montgomery, Ala., April 19th, 1897.—Sealed proposals for furnishing and delivering at Pensacola, Fla., an ELECTRIC PLANT and AMMUNITION HOISTS, will be received here until 12 o'clock m., May 29th, 1897, and then publicly opened. Information furnished on application. F. A. MAHN, Major, Engrs. 17-4t

SANITARY DISTRICT OF CHICAGO.

TO CONTRACTORS.

Sealed proposals addressed to the Board of Trustees of the Sanitary District of Chicago, and indorsed: "Proposal for dredging the Chicago River between its mouth and Robey street," will be received by the Clerk of the said Sanitary District in Chicago, Ill., until 12 m. (standard time) of Wednesday, the 19th day of May, 1897, and will be opened by the said Board at a regular meeting held that day or later at a special meeting called for that purpose.

The work for which said tenders are invited is the dredging of the Chicago River to such widths and depths as are shown upon the plans or as shall be directed by the Engineer between its mouth and the West Fork in the South Branch of said river and between the junction of the South Branch with the West Fork and Robey street in said West Fork and the removal of such docks and other obstructions as may be directed by the Engineer.

The volume of material to be dredged is approximately 600,000 cubic yards, which must be excavated removed, and disposed of without further cost to the Sanitary District than is covered by the prices named in the bid.

Each proposal must be accompanied by a certified check or cash to the amount of $2,000.

All certified checks to be drawn on some responsible bank doing business in the City of Chicago, and be made payable to the order of the "Clerk of the Sanitary District of Chicago." Said amount of $2,000 to accompany each bid will be held by the Sanitary District until all of said proposals have been canvassed and contracts awarded and signed, the return of said check or cash to the bidder to whom said work shall have been awarded being conditioned upon appearing within ten days after notice of such award being given, with bondsmen, and executing a contract with the Sanitary District for said work so awarded, and giving a bond satisfactory to the Board of Trustees for the fulfillment of the same in the amount of $25,000.

All proposals must be made upon the blank forms furnished by the Sanitary District and must give the price of each separate item of work.

The bids will be compared on the basis of the Engineer's approximate estimate of quantities, which will be furnished with copies of the specifications.

No proposal will be considered unless the party making it shall furnish evidence satisfactory to the Board of Trustees of his ability to do the work, and that he has the necessary pecuniary resources to fulfill the conditions of the contract, provided such contract shall be awarded him.

Bidders are required to state in their proposals their individual names and places of residence in full.

Specifications and plans may be seen at the office of the Chief Engineer, Rialto Building, Chicago, Ill.

The said Board of Trustees reserves the right to reject the whole or part of any and all bids.

THE SANITARY DISTRICT OF CHICAGO.
By THOMAS KELLY,
President of its Board of Trustees.

Attest: JAMES REDDICK, Clerk.
Chicago, Ill., February 24, 1897. 14-6t

PROPOSALS FOR ELECTRIC ARC LAMPS IN THE DISTRICT OF COLUMBIA.—Office of the Commissioners, D. C., Washington, D. C., April 20, 1897.—Sealed proposals will be received at this office until 12 o'clock m., on April 30, 1897, for furnishing and maintaining electric arc lamps in the public streets and avenues of the District of Columbia during the year ending June 30, 1898. Specifications and blank forms of proposals may be obtained at this office. J. W. ROSS, GEORGE TRUESDELL, W. M. BLACK, Commissioners, D. C. 17-1t

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